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ABSTRACT

This handbook is intended as a management resource for postsecondary and adult vocational education programs. Its uses include assessment of the effectiveness of current programs; identification of the need for new or expanded programs; development of an action plan for initiation, improvement, expansion, or termination of programs; and the translation of those plans into budget projections. Section I discusses the advantages of an evaluation, planning, and budgeting system and describes the essential characteristics of an effective system. Section II provides an overview of the three components of the model: evaluation, planning, and budgeting. A summary overview of suggested annual timelines is included. Sections III, IV, and V discuss more fully suggested procedures for implementing pre-planning activities, evaluation, planning, and budgeting. The final section focuses on repeating the cycle and improving the process. Appendixes, amounting to approximately one-half of the handbook, include current state-adopted standards for program categorization; specific definitions, data sources, instruments, and current state-adopted standards for the secondary assessment component; specific definitions of six key indicators, suggested data sources, instruments, and weighted index system for use in the evaluation component for new and expanded programs; and the 113-page evaluation report of the model. (YLB)

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THE PRELIMINARY GEORGIA EVALUATION, PLANNING & BUDGETING MODEL: A HANDBOOK OF SUGGESTED MANAGEMENT PROCEDURES

GEORGIA STATE BOARD FOR POSTSECONDARY VOCATIONAL EDUCATION

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THE PRELIMINARY GEORGIA EVALUATION, PLANNING & BUDGETING MODEL: A HANDBOOK OF SUGGESTED MANAGEMENT PROCEDURES

FOR

GEORGIA STATE BOARD FOR POSTSECONDARY VOCATIONAL EDUCATION

BY

GEORGIA STATE UNIVERSITY

FOREWORD

The primary mission of postsecondary and adult vocational education in Georgia is the provision of programs and services which develop those job skills demanded by business and industry and needed by its citizens to obtain, maintain and advance in gainful, satisfying employment. In fulfilling this mission, the postsecondary and adult program becomes a major contributor to the economic health and well-being of the State and of its citizens.

The design and continued delivery of currently relevant job training programs and services is predicated on the establishment and utilization of a comprehensive evaluation, planning and budgeting system at the local and state levels. This handbook is intended to serve as a management resource for assessing the effectiveness of current programs, identifying the need for new or expanded programs, developing an action plan for the initiation, improvement, expansion or termination of programs as may be appropriate, and the orderly translation of those plans into budget projections. Although the Evaluation-Planning-Budgeting Model developed under the auspices of this project focuses exclusively on preparatory programs, it is felt that the system and approach outlined herein can be expanded and adapted at the local level to address supplementary programs as well as the institution's support services.

This handbook is intended to serve as a guide and should not be viewed as prescriptive. Although the program criteria and standards identified herein are approved measures of the State Board of Postsecondary Vocational Education, the local institutions are encouraged to adapt the suggested procedures and strategies to meet the specific demands of its local situation.

Gail Trapnell, Ph.D.
Project Director
Georgia State University

ACKNOWLEDGEMENTS

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TABLE OF CONTENTS

FOREWORD i

ACKNOWLEDGEMENTS ii

SECTION I: INTRODUCTION 1

Advantages of an Evaluation, Planning and Budgeting System 1
Essential Characteristics of an Effective Evaluation, Planning and Budgeting System 3

SECTION II: COMPONENTS OF THE EVALUATION, PLANNING AND BUDGETING SYSTEM, AN OVERVIEW 5

The Evaluation Component 5
Evaluation: On-Going Programs 6
Evaluation: New/Expanded Programs 8
The Planning Component 9
Program Improvement Plans 9
Program Initiation/Expansion Plans 10
The Budgeting Component 11
Summary Timelines and Schedules 14

SECTION III: PRE-PLANNING ACTIVITIES 17

Team Involvement and Organization 17
External Involvement 18
Internal Involvement 19
Organization of Effort 20
Assessment of Institutional Environment 23
Identification of Planning Assumptions 24
Examination of Mission and Goals 26
Identification of Resource Requirements 27
Identification of Annual Planning Calendars 28
Organizing Staff Development Activities 31
Summary 33

SECTION IV: EVALUATION 34

Assessment of On-Going Programs 35
Preliminary Assessment 35
Secondary Assessment 37
Needs Assessment for New and Expanded Programs 40
Determination of Unmet Need & Community Support 41
Cost Analyses 47
Weighted Index System 50
Summary 53

SECTION V: PLANNING AND BUDGETING 54

Identification of Program Goals 54
Identification of Institutional and Program Objectives 55
Identification of Planning Strategies 58
Establishment of Timelines 60
Specification of Staff Assignments 60
Identification of Evaluation Measures 61
Presentation of the Operational Plan 61
Budgeting 63
Budget Projections: New & Expanded Programs 63
Budget Projections: Ongoing Programs 69
Budget and Application Presentation 74
Summary 75

SECTION VI: REPEATING THE CYCLE, IMPROVING THE PROCESS 76

Management Commitment for Follow-Through 76
Management Commitment for Improvement of the System 78

APPENDIX A: EVALUATION OF ON-GOING PROGRAMS: KEY INDICATORS, DEFINITIONS, & STANDARDS FOR PRELIMINARY ASSESSMENT 81

APPENDIX B: EVALUATION OF ON-GOING PROGRAMS: KEY INDICATORS, DEFINITIONS, STANDARDS, INSTRUMENTS FOR SECONDARY ASSESSMENT 85

APPENDIX C: EVALUATION OF NEW AND EXPANDED PROGRAMS: KEY INDICATORS AND INSTRUMENTS 93

APPENDIX D: FORMAT, PROGRAM IMPROVEMENT PLANS AND PROGRAM INITIATION/EXPANSION PLANS 98

APPENDIX E: MAJOR SOURCES OF DATA 102

BIBLIOGRAPHY 107

SECTION I

INTRODUCTION

IF WE COULD KNOW WHERE WE ARE AND WHITHER WE ARE TENDING, WE COULD THEN BETTER JUDGE WHAT TO DO AND KNOW HOW TO DO IT.

ABRAHAM LINCOLN

The establishment of an integrated system for evaluation, planning and budgeting at the local school level should not be viewed as an end unto itself. Rather it should be preceived as a tool for achieving better results through change, innovation and problem solving. Such a system can provide a disciplined, structural matrix within which important management decisions can be made. Although it can never insure that those decisions will inevitably be right decisions, nor can it control future uncertainties, it can provide the data base, insight and perspective for making sound management decisions. According to Kastens, "planning cannot predict the future, but it can provide a kind of gyroscopic stabilizer that at least provides a firm platform from which unexpected shocks can be sustained and new forays initiated." (Kastens, 1976)

Advantages of an Evaluation, Planning and Budgeting System

One of the major advantages in utilizing an integrated evaluation, planning and budgeting system is improved efficiency and effectiveness in the utilization of limited resources. The postsecondary and adult vocational education program in Georgia is in direct competition with all other educational programs in the State at the elementary, secondary, postsecondary, and higher education levels of instruction. It should also be recognized that the postsecondary and adult vocational education program is also in indirect competition with every other agency and line item within the State budget. This means that every increase in dollars appropriated to postsecondary and adult vocational education comes at the expense of other

agencies, institutions, programs and services. Thus it is axiomatic that the full measure of the dollar be obtained in the design and delivery of relevant programs and support services. Effective and efficient utilization of current human, fiscal and physical resources is not only a moral obligation of the local institution to the taxpayers of the State, but it provides the most convincing basis in substantiating requests for continued support. It likewise enhances the credibility of the institution's request for increased support. Optimal use of resources which maximize economic returns to the State and local community is a primary outcome of systematic evaluation, planning and budgeting.

The utilization of a systematic, integrated approach to evaluation, planning and budgeting helps to assure the continued viability of the institution in the community as an agent for economic stablity and growth and for meeting the employment training needs of its citizens. Because the system reflects a dynamic, non-static process, it requires the continuous interface with the business community, effective utilization of specially appointed task forces and advisory committees, and extensive inter-agency and community collaboration. The dynamics of such a process helps to assure the provision of programs and services highly relevant to community need. Thus the business community and students' perception of the institution becomes that of "economic benefactor". When that perception of the institution is held by the community at large, problems relating to enrollment, completion, placement, curriculum relevancy and staff development are significantly diminished.

A third major advantage of an integrated evaluation, planning and budgeting system is the transformation of the institution into a pro-active as opposed to a re-active posture. This is reflected in the management style of the institution's leadership as well as in its faculty and staff. This is often referred to as an entrepreneurial approach in contrast to the traditional bureaucratic profile. Emphasis is shifted from essentially maintaining the status quo to making things happen, from seeing things as they currently exist to visualizing what could be, from being a lethargic reactor to change to being an instrument for change.

Essential Characteristics of An Effective Evaluation, Planning and Budgeting System

In reviewing lessons learned by business and industry, as well as by educational institutions, several characteristics are found to be critical in the design and implementation of an effective evaluation, planning and budgeting system. Among those characteristics are:

1. The focus on the system should be maximization of outputs from available resources.
2. The system should be applicable to periods of retrenchment as well as expansion.
3. It should go beyond the traditional process of disjointed incrementalism and encourage major changes in direction and scope.
4. The system should be comprehensive and flexible and should incorporate dynamic processes.
5. Emphasis should be placed on the process and working papers as products rather than on fixed ends and concrete plans.
6. The evaluation, planning and budgeting system should be pervasive to the management of the institution and not separated from decision making.
7. There should be wide spread ownership throughout the faculty and staff in the design and utilization of the system.
8. The system should provide a means for establishing institutional priorities.
9. The system should provide for improved coordination between state and local levels.
10. The management of the institution must be totally commited to the system, believe in the benefits which can be derived from its utilization, and serve as a role model to the faculty and staff in its implementation.

Of the characteristics identified, the most important one is the commitment of the institution's management team to making the system work. Providing the leadership, setting the stage, encouraging parti-

cipation of the total faculty and staff, encouraging risk-taking and entrepreneurial activities, rewarding creativity and vision, providing support systems for the maximum contribution of staff expertise to the attainment of organizational and individual goals, utilizing checkpoints and measures to jointly assess progress and need, and incorporating the system in each unit, department, division and office of the institution are requisite management actions to the success of the system.

Peters and Waterman found that in those businesses which excelled, some eight to nine failures were encountered before one success was realized. Rather than viewing those statistics with a defeatist attitude, management used that data as rationale for experimentation, risk-taking, and entrepreneurial activity. They realized that it was only after trial and error and failure could there be success. Management support and encouragement in attemtping new and innovative programming as well as counsel and support during times of negative outcomes is of equal or greater importance to the staff than is management's recognition of success stories.

Experienced planners agree that it takes about five planning cycles before an organization begins to feel comfortable and competent in long range planning. It is estimated to take equally as long for an institution to design and utilize an effective evaluation, planning and budgeting system. As identified in the characteristics essential for an effective system, however, emphasis must be placed on the dynamics of the process and the acknowledgement of it as being an ever evolving process.

SECTION II

COMPONENTS OF THE EVALUATION, PLANNING & BUDGETING MODEL

PLANNING IS...ATTENDING TO THE GOALS WE OUGHT TO BE THINKING ABOUT AND NEVER DO, THE FACTS WE DO NOT LIKE TO FACE AND THE QUESTIONS WE LACK THE COURAGE TO ASK.

JOHN GARDNER

Planning is predicated on two major data items: knowing where you are and where you want to go. With those information items in hand, the process of planning becomes one of identifying, selecting and organizing alternative strategies for reaching the desired destination. The budgeting component follows as a logical outgrowth of the planning process in that it identifies the resources needed to implement the plan effectively and efficiently.

The Evaluation Component

The evaluation component of the model consists of two major parts: (1) the criteria, standards and suggested procedures for assessming the effectiveness of on-going programs including the need for improvement, modification or termination, and (2) the criteria or key indicators and suggested procedures for assessing the need for the expansion of given programs or the initiation of new programs. This component is essentially designed to assist the manager in finding the answers to the following three questions:

"How am I doing?"

"Am I doing things right?"

"Am I doing the right things?"

The answers to those questions are based on the assumption that someone has defined "right". The first two questions relate more clearly to assessing the effectiveness of on-going programs, and the latter to the assessment of need for the termination or expansion of current programs or the initiation of new programs.

Evaluation: On-Going Programs

Three criteria have been identified as being key indicators to the health of an on-going program within an institution. Each of these criteria focus on two measures, including three-year averages and three-year trend lines compared to established standards. The model calls for the application of these measures on an annual basis to determine the acceptability of each given program within the school. The criteria or key indicators include:

1. Enrollment
   a. Three-year average enrollment compared to standard
   b. Three-year trend in enrollment compared to standard
2. Completion
   a. Three-year average completion compared to standard
   b. Three-year trend in completion compared to standard
3. Placement
   a. Three-year average placement compared to standard
   b. Three-year trend in placement compared to standard

Refer to Appendix A for explicit definitions, data sources, and current state-adopted standards.

Based on the outcome of this preliminary assessment, each program is classified into one of three categories:

Category A -- represents those programs of exceptional quality which exceed state standards

Category B -- represents those programs of acceptable quality in that they meet state standards

Category C -- represents those programs which fail to meet state standards, which need major modification, and which by virtue of their classification, are placed on probationary status

The current state-adopted standards for program categorization are identified in Appendix A.

Should a program be classified into Category C for a given year, the model calls for a secondary assessment of that program. The primary purpose of this secondary assessment is to seek more specific indicators relating to the cause of the program's deficiency. It is doubtful that any one factor is the sole contributor to a program's weakness. It is more likely to be a composite of factors, some of which may be internally controllable and others of which may be externally uncontrollable. The five key indicators or criteria which comprise the secondary assessment should, therefore, be viewed as providing "partial clues" rather than "complete answers" for a program's deficiency. These criteria include:

1. Employer Evaluation of the Program
2. Student Evaluation of the Program
3. Assessment of Program Facilities
4. Assessment of Equipment and Instructional Materials
5. Assessment of Business Support

Noticeably absent from this list of secondary assessment indicators is the evaluation of the instructor's expertise and performance. This was purposefully omitted from consideration within this model as it is the primary focus of each institution's Personnel Management and Staff Development Program. Focus on the development of the human resources within the institution is of critical importance in the accomplishment of that institution's mission, goals and objectives. It is imperative, therefore, that this thrust utilize its own uniquely designed system for needs assessment and staff development for enhancing the competencies of the total faculty and staff. It is the responsibility of the management team, however, to coordinate these two systems and to assure that the initiatives generated from each system mutually enhance, support and compliment each other.

The specific definitions, data sources, instruments and current state-adopted standards for the secondary assessment component are included in Appendix B.

Evaluation: New/Expanded Programs

Strong justification for new and/or expanded programs has become of increased importance to the State's network of area vocational-technical schools. Traditional incremental increases in program expansion have become a chapter in the history books as have the arbitrary designations of new programs based on individual desires or previous patterns of program development witnessed in the past. Rather, legislative and public outcries in recent years have placed emphasis on current and projected employment demands as well as increased attention to cost efficiency measures.

Six key indicators are included in the model for assessing the need for new and/or expanded programs. They include:

1. State-wide employment trends
2. Unmet need within a 50 mile radius of the school
3. Estimated start-up cost
4. Estimated annual operating cost
5. Estimated cost per placement
6. Evidenced local business/industry support for a proposed program

Because it is anticipated that resources to support the expansion and/or initiation of new programs will continue to be limited, a system for the prioritization of needs and subsequent budget requests is axiomatic. To be credible, such a system must provide the means whereby the priorities can be established in an orderly, objective, rational manner. Subjective opinions and political pressures should be minimized in order that the best interests of the State and the local community can be served.

The model incorporates a weighted index component wherein a weighted profile can be calculated for each proposed program and priorities established on the basis of profile comparisons. Each priority can be rank ordered on the basis of each program's composite weight.

Refer to Appendix C for specific definitions of the six key indicators, suggested data sources, instruments and the weighted index system to be utilized in the evaluation component for new and expanded programs.

Suggested procedures for implementing the evaluation component of the model are discussed more fully in Section IV of the handbook.

The Planning Component

Ackoff refers to planning as a process that involves making and evaluating a set of decisions before action is required in a situation. He goes on to suggest that planning is necessary in those situations wherein it is belived that unless action is taken, a desired future is not likely to occur. It is also critical in those situations wherein if appropriate action is taken, the likelihood of a favorable outcome can be increased. (Ackoff, 1970)

Program Improvement Plans

The development of a Program Improvement Plan is required for all programs categorized as "C" in the assessment process. It outlines a followup plan of corrective action to be taken in the subsequent year whereby the program can be strengthened and the deficiencies minimized or dissolved. The model calls for the following components to be included in the plan:

1. Identification of cause(s) for the program deficiencies
2. Specific corrective action to be taken within the next year
3. Identification of specific program improvement objectives
4. Outline and description of strategies for accomplishing the stated objectives
5. Specified timelines for the implementation of the identified strategies
6. Identification of specific staff assignments to individuals for the implementation of the strategies
7. Identification of evaluation measures to be used by the management team in assessing progress made in the implementation of the strategies and in the accomplishment of the objectives.

Should a program be categorized as "C" following the assessment during the subsequent year, that program will be placed on probationary status. The Program Improvement Plan to be developed and submitted to the State Board for Postsecondary Education the second year must be based on an assessment of the remedial action taken during the previous year, and the corrective action to be taken during the following year including the identification of specific program improvement objectives, strategies, timelines, staff assignments and evaluation measures.

Program Initiation/Expansion Plans

Should a school be interested in expanding a current program or initiating a new program, a Program Initiation/Expansion Plan must be submitted to the State Board for Postsecondary Vocational Education for approval. This plan includes two major components: (1) documentation of the program's justification, and (2) an outline of the action to be taken to assure the orderly expansion or initiation of the program.

The documentation section of the plan should include a synthesis of the data collected during the needs assessment process, i.e. state-wide employment trends, unmet need within a fifty mile radius of the school, estimated start-up equipment cost, estimated annual operating cost, estimated cost per placement, and evidence of local business/industry support for the proposed program. This section should also include the weighted profile of each individual program request in comparison to each other and the subsequent priorities established at the local level. The provision of these data elements will enable the State Board staff to assess, coordinate and prioritize program need and budget requests on a state-wide basis.

Section Two of the Program Initiation/Expansion Plan should include the following:

1. Identification of specific program development objectives
2. Outline and description of strategies for accomplishing the stated objectives
3. Specified timelines for the implementation of the identified strategies
4. Identification of specific staff assignments to individuals for the implementation of the strategies
5. Identification of evaluation measures to be used by the management team in assessing progress made in the implementation of the strategies and in the accomplishment of the objectives.

Suggested procedures for implementing the planning component of the model are discussed more fully in Section V of this Handbook.

The Budgeting Component

As stated previously, the budgeting component is a logical outgrowth of the evaluation and planning process in that it identifies the resources needed to implement the proposed plans effectively and efficiently. Although the specific line items within the budget requests or application may be modified periodically, attention should be focus on the following budget elements:

1. Plant expansion/renovation
2. Equipment purchase/replacement
3. Supplies/materials
4. Staff salaries
5. Staff development
6. Travel
7. Contracted/leased services
8. Other as may be deemed appropriate

Just as the conclusions of a research report must be based on the findings of that research effort, so too must the budget requests be based on the assessment outcomes and the proposed followup plans. The credibility and reputation of the local institution as well as that of the state-wide system is predicated on the provision of valid data and sound management judgment as reflected in that institution's official budget projections and applications.

A more detailed description of suggested procedures for implementing the budgeting component of the model is included in Section VI of the handbook. An illustration depicting a summary of the Evaluation, Planning, and Budgeting Model is included for the reader on the following page.

EVALUATION, PLANNING & BUDGETING MODEL

EVALUATION: ON-GOING PROGRAMS

PRIMARY ASSESSMENT: ALL PROGRAMS

KEY INDICATORS:

Enrollment:
3 yr average to standard
3 yr trend
Completion:
3 yr average to standard
3 yr trend
Placement:
3 yr average to standard
3 yr trend

SECONDARY ASSESSMENT: "C" PROGRAMS

KEY INDICATORS:

Employer Evaluation
Student Evaluation
Assessment of Facilities
Assessment of Equipment
& Instructional Materials
Assessment of Business Support

PLANNING: PROGRAM IMPROVEMENT PLAN FOR "C" PROGRAMS

IDENTIFY:

Cause(s) for Deficiency
Corrective Action to be Taken
Program Improvement Objectives
Strategies for Accomplishment
Specified Timelines
Specified Staff Assignments
Evaluation Measures

EVALUATION: NEW/EXPANDED PROGRAMS

KEY INDICATORS:

STATE-WIDE EMPLOYMENT TRENDS

UNMET NEED WITHIN 50 MILE RADIUS

ESTIMATED START-UP EQUIPMENT COST

ESTIMATED ANNUAL OPERATING COST

ESTIMATED COST PER PLACEMENT

EVIDENCED LOCAL BUSINESS/INDUSTRY SUPPORT FOR PROGRAM

PLANNING: PROGRAM INITIATION/EXPANSION PLA

IDENTIFY:

Documentation of justification
Specific Program Objectives
Strategies for Accomplishment
Specified Timelines
Specified Staff Assignments
Evaluation Measures

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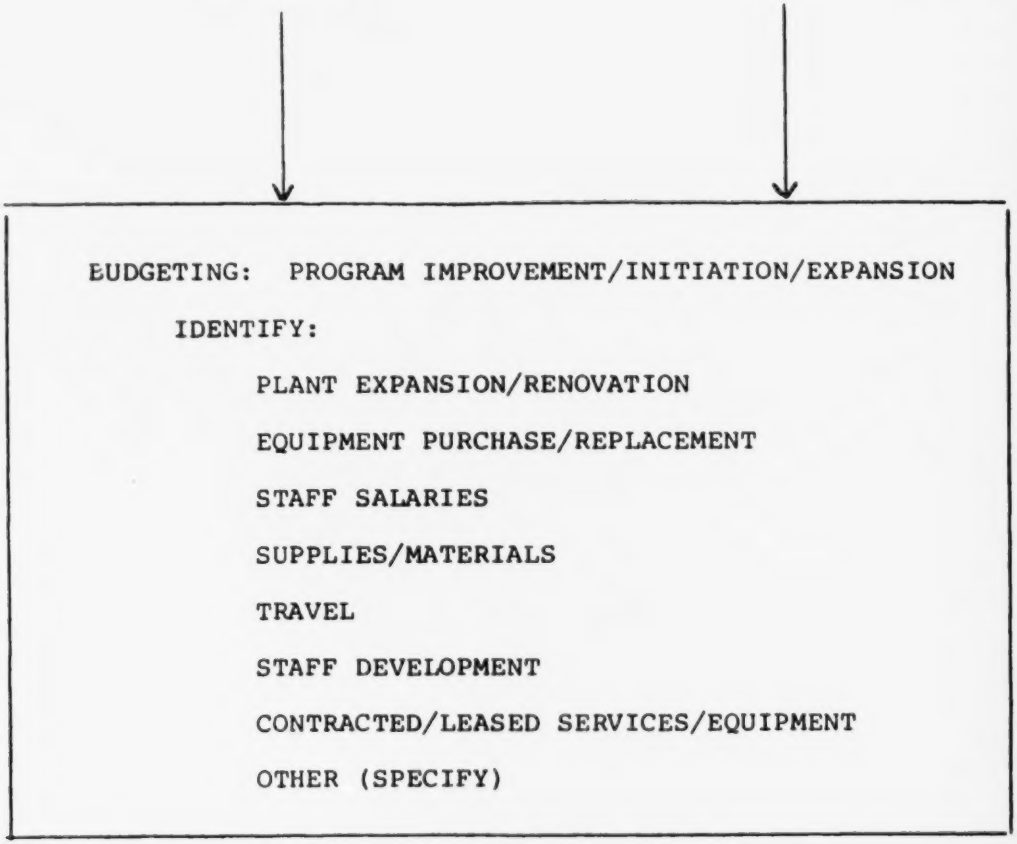
BUDGETING: PROGRAM IMPROVEMENT/INITIATION/EXPANSION
IDENTIFY:
PLANT EXPANSION/RENOVATION
EQUIPMENT PURCHASE/REPLACEMENT
STAFF SALARIES
SUPPLIES/MATERIALS
TRAVEL
STAFF DEVELOPMENT
CONTRACTED/LEASED SERVICES/EQUIPMENT
OTHER (SPECIFY)

13

Summary Timelines and Schedules

The establishment of realistic timelines is critical to the successful implementation of an evaluation, planning and budgeting system. Adequate lead-time for pre-planning activities, adequate time for needs assessment, and sufficient time for sound planning and budgeting activities are of major importance at the local level. Of equal importance, however, is an awareness of the state timelines for the submission of proposed plans and budget projections to the Georgia Legislature for appropriations.

It should be noted that a two-year period of time is required between the local institution's initial assessment of need for new and expanded programs and the initiation of that program subsequent to legislative appropriation of new or additional funds over and above incremental increases. This two year time lag may be identified as follows:

Summer Quarter, 1st year -- Preplanning activities at local level initiated

Fall Quarter, 1st year -- Evaluation component implemented at local level

Winter Quarter, 1st year -- Planning and budgeting components implemented at local level; plans and budget requests submitted to State Board for Postsecondary Vocational Education

Spring Quarter, 1st year -- Reviewed by State Board staff; approved by State Board; submitted to OPB

Summer Quarter, 2nd year -- Reviewed by OPB: submitted to Office of the Governor

Fall Quarter, 2nd year -- Reviewed by Office of the Governor; submitted to the Legislature sub-committee

Winter Quarter, 2nd year -- Legislative review and appropriations

Spring Quarter, 2nd year -- State Board approval of local applications

Summer or Fall Qtr, 2nd yr--Initiation of new or expanded program

As can be concluded from this review, failure on the part of the management team to initiate needs assessment, planning and budgeting activities in any given year will preclude the establishment of new programs or the expansion of on-going programs two years hence if substantial increases in funds are required.

Should no major increases in funds be required, however, to implement an institution's proposed plans, the time lag between the initiation of the evaluation/needs assessment process and the implementation of that school's proposed plan can be shortened by twelve months or more. If the institution's plans for program improvement or modification are such that State Board approval is not required, the time delay could be dissolved entirely depending upon the degree of budgetary discretion accorded the management team.

From this overview it is obvious that greater attention should be focused on the improved utilization of current resources. Optimal use of current resources to maximize returns must become the primary objective of the management team.

A summary overview of suggested annual timelines is included on the following page as an aid to the management team in the establishment of local timeframes and deadlines for implementing the evaluation, planning and budgeting system.

SUMMARY SCHEDULE FOR DATA COLLECTION, EVALUATION, PLANNING, BUDGETING

FY (3rd Out Yr) -- Data collection of enrollment, completion and placement by taxonomy by instructor; includes Summer Quarter through Spring Quarter; data taken from MIS unduplicated enrollment report issued Fall Quarter

FY (2nd Out Yr) -- Data collection of enrollment, completion and placement by taxonomy by instructor; includes Summer Quarter through Spring Quarter; data taken from MIS unduplicated enrollment report issued Fall Quarter

FY (1st Out Yr) -- Data collection of enrollment, completion and placement by taxonomy by instructor; includes Summer Quarter through Spring Quarter; data taken from MIS unduplicated enrollment report issued Fall Quarter

CURRENT FISCAL YEAR --

SUMMER QUARTER -- Preliminary plans made to assess unmet need within 50 mile radius of school for new or expanded programs; review made of state-wide employment trends and demand

FALL QUARTER -- Conduct assessment of all on-going programs; conduct secondary assessment of programs categorized as "C" by six key indicators. Complete assessment of unmet need for new or expanded programs; review cost data from state; complete weighted index profile of all proposed program additions and/or expansions to determi priority

WINTER QUARTER -- Complete Program Improvement Plan of follow-up measures to be taken for all "C" programs and others as may be needed. Identify budget need requirements for measures identified in Program Improvement Plan. Complete Progr. Planning Guide for New and Expanded Programs. Identify budget need requirements for components identified in Program Planning Guide. Submit assessment data from on-going programs, weighted index profile with program priorities, Program Improvement Plan, Program Planning Guide, and budget requests to the state staff of the State Board for Postsecondary Vocational Education.

16

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SECTION III

PRE-PLANNING ACTIVITIES

FOR A MAN WITHOUT AN INTENDEND PORT, NO WIND IS FAVORABLE.

SOCRATES

One basic tenet in business management is "front-end investment pays". Although that maxim is applicable to many situations, it is most often used to highlight the need for pre-planning prior to the initiation of any major effort. In reference to the design and implementation of an integrated evaluation, planning and budgeting system at the local level, pre-planning thought and deliberation are needed for such considerations as the following: identification of persons and groups to be involved and the organization of those groups in an effective manner; assessment of the political, economic and social environment of the institution; identification of planning assumptions; identification of resource requirements needed to implement the system; establishment/review of institutional mission statements and goals; identification of annual planning calendars; and appropriate staff development initiatives to help assure success.

Team Involvement and Organization

One of the most crucial outcomes which should be sought in the process of evaluating, planning and budgeting is ownership in the process and of the products by as many individuals and groups as possible. According to Dunham, "...negative reaction is born out of lack of involvement—more specifically, a lack of ownership of pieces of the plan....Reaction can be minimized in direct proportion to the quantity and quality of personnel making input..." (Dunham, 1978)

More than attempting to reduce negative reaction, however, is the need to enhance positive acceptance and support. That outcome can only be

achieved through a style of participatory management which encourages open, active collaboration and participation of the faculty and staff, community groups, community leaders and support agencies.

External Involvement

The community at large represents a wealth of expertise which is typically available for the asking. As is true in the appointment of advisory committee members, every effort should be made to utilize the talents of the task force members, advisory committee members, planning committee members and external special consultants to the fullest extent. Token appointments, perfunctory committee and committee meetings only serve to diminish results and create negative public relations.

One of the major groups of individuals who should be involved in the design and implementation of the system is, of course, the craft advisory committees representing the individual instructional programs in the institution. Their involvement in the annual evaluation of the program, the design of a followup plan for program improvement and the translation of that plan into realistic budget projections can be of considerable value. Participation in these processes assures their active involvement in the respective programs throughout the year rather than on a quarterly or semi-annual committee meeting basis.

Community agencies and organizations whose objectives and activities directly or indirectly impact upon the operation of the school should also be involved in the process. Such groups include without being limited to the Chamber of Commerce, Retail Merchants' Association, trade groups/associations, employment office, welfare office, family counseling centers, correctional institutions, military installations, and various civic organizations. The fabric of each community is different; thus, care should be taken in identifying representatives from those community organizations and agencies which are truly reflective of that community's profile. Emphasis should not be placed on quotas, but rather on wide-spread community involvement whereby the outcome will be community ownership and support.

Finally, attention should be given to the involvement of designated individuals selected because of their particular expertise and/or community influence. Where a particular need may exist for expertise in needs assessment survey design, for instance, an individual may be invited to serve as a special consultant to the institution for that particular purpose. Or, should the need exist for expertise to help train the institution's management team in the use of such techniques as PERT or PPBS, a management consultant or business trainer might be invited to serve in that capacity.

Of equal importance is the active involvement of influential leaders in the community in the design and implementation of the evaluation, planning and budgeting process. Their assistance in helping to secure needed resources, obtain the support of particular groups or agencies, enhance the public relations image of the institution, and contribute to the achievement of the institution's mission can be priceless.

Internal Involvement

Insofar as faculty and staff involvment is concerned, the major objective is to involve everyone in a meaningful way. Token involvement internally is just as superficial and as ineffective as is token external involvement. Many studies indicate, in fact, that such superficiality contributes to a diminishment in management's credibility, staff trust in management, and to staff morale. The incorporation of the concepts from Maslow's hierarchy of need into one's leadership style places emphasis on meaningful group involvement and recognition of individual worth, participation and contribution.

Although initial attention may first be given to the designation of administrative staff personnel and faculty because the focus of the current model is preparatory instructional programs, that focus should be widened to include personnel from student services, curriculum and staff development, business management, maintenance, and clerical services. The outcome to be sought is the personal commitment of each faculty and staff member to the belief that "this is my school, and this is how I can help make it better!"

Organization of Effort

It should be acknowledged up front that there is no one best way to organize an institution's staff effort or its external group involvement for its evaluation, planning and budgeting efforts. Some suggestions can be given, however, which may serve as a guide in the organization of those efforts whereby the greatest degree of efficiency and effectiveness can be achieved. Efficiency may be referred to as getting a job done in the least amount of time and with the least expenditure. The emphasis is typically on control of fiscal resources and immediate results. Effectiveness, on the other hand, takes into account the satisfaction of the human factor in simultaneously achieving personal as well as organizational goals and long-term consequences. Where efficiency is the sole objective, an autocratic management style is usually reflected. Where effectiveness is the primary objective, the democratic style of management is most often found. If equal importance is placed on efficiency and effectiveness, however, a participatory style of management is generally utilized. Since the utilization of an integrated evaluation, planning and budgeting system should become a pervasive activity of the institution, the participatory style of management should prove to be the most productive.

As stated previously, the implementation of this system should be a dynamic process. This places emphasis on the need for flexibility in organization as continuous efforts should be made to strengthen and improve the process. This suggests the use of temporary appointments, task forces and ad hoc committees. With this approach specific assignments can be made to designated individuals or groups; upon completion of that assignment, different configurations of talent can be designed to meet other purposes.

Another management maxim refers to the concept, "if everyone is in charge, no one is in charge". In applying this maxim, however, the phrase, "in charge" is often abused. Rather than focusing on rigid, dictatorial position control, emphasis should be placed on personal leadership and coordination abilities. This calls from the appointment of a "planning

coordinator" within the institution who will provide leadership in directing and coordinating the efforts of those involved in the process. Other responsibilities might include providing direction in the following:

...formulation of teams, task forces, and ad hoc groups

...definition of team parameters and major responsibilities

...establishment of timelines

...identification and location of pertinent data sources

...organization of orientation and briefing sessions

...monitor group efforts in meeting deadlines and completing assignments

...provide counsel and support as needed to team members

In addition to the appointment of a planning coordinator, there may be a need to appoint a "planning council" composed of both external and internal team leaders. As is true with the planning coordinator, it is critical that the countenance of the council be one of "team effort" and "peer collaboration". The role of the council is also one of coordination, direction, and monitoring the collective effort. Utilization of a council can help to identify potential trouble spots quickly, dissolve concerns, identify and provide needed resources, identify different configurations of talent to accomplish an objective efficiently and effectively, and multiply expotentially the group's ownership in the process.

Moving beyond the planning council, may be the need to appoint special task force groups and/or special topic groups. The special topic groups may be comprised of the faculty within a given program area together with representatives from that program's craft advisory committee. Special task force groups may be appointed to address a particular concern, i.e. public relations image of the institution, identification of alternative funding sources. Still others may be appointed to address particular support functions or areas, i.e. student services, grounds and maintenance, clerical services.

As individuals volunteer or are appointed to serve on these groups, attention should be given to the appointment of not only those

persons directly involved in the process or function area itself, but users of that service and persons affected by that particular area. The appointment of "front-line staff" as well as supervisors on the same team which has a peer configuration may also be helpful depending upon the personalities involved and the individual circumstances. In each instance, efforts should be made to limit the membership to 12-15 per team. Exceptions, of course, may exist, and where larger numbers may work effectively together, no attempt should be made to hold to an arbitrary size.

One of the major ingredients which enhances individual ownership is "seeing the fruits of ones labor". This suggests that although team configurations may change to meet particular needs, it is important that those individuals stay involved in the overall process and implementation of the total system. When individuals participate in the evaluation of a program or support area, their interest and expertise are enhanced for participation in the planning component. Likewise that participation generates interest in budgeting, implementation of the plan and re-assessment of the program or area the subsequent year to determine the improvements made. Thus, it is important that the system be implemented as an integrated, cyclical process.

Assessment of Institutional Environment

Lewis identifies two environemnts of an educational institution including the microenvironment and the macroenvironment. The microenvironment refers to the interal context of the instituion and its internal operations, programs and services as they are impacted upon by faculty, staff, students and administrators. The macroenvironment refers to the external forces which affect the institution including society, government, tecnhology, politics, commerce, legislation, international relations, demography and the media. (Lewis, 1983)

He suggests that time should be devoted to analyzing these environments for the purpose of identifying key trends, factors, forces and phenomena which are projected to have a potential, major impact on the formulation and

implementation of long-range goals and strategies.

One approach which can be used in making these assessments is referred to as Systematic Probing and Identification of the Relevant Environment, or SPIRE. Developed by Klein and Newman, its purpose is to identify a need for change and/or appropriate responsiveness early enough to permit timely action. (Klein and Newman, 1980) The technique involves identifying a factor within the environment which has in the past or is projected in the future to impact on the operation of the institution; predict its potential impact both in a negative and in a positive scenario; based on these scenariors, outline an appropriate response or contingency plan for the institution. Identify the programs, services and institutional policies anticipated to be affected or impacted by that environmental factor. Examples of factors which may be considered include governance, increases/decreases in unemployment, major changes in population demographics, patterns of work and leisure, changes in technology at an expotential rate coupled with the need for continuing vocational education, changing role of vocational education in the secondary schools.

Although Klein and Newman describe the utilization of the SPIRE technique in a responsive or reactionary mode, it can also be used in a proactive manner to place the institution at the cutting edge of change. The key is lead time. If an adequate effort has been made to study the environmental factors which are projected to impact on the institution, enough lead time may be allocated for the institution to develop a proactive plan rather than responding to change, or a need, or pressure from a "fire-fighting stance".

Identification of Planning Assumptions

The analyzation of the external and internal environemnt of the institution should be followed with the statement of planning assumptions. The planning council may be given the responsibility for constructing assumption statements based on the information and data gleaned from the various groups whom they coordinate. These statements should encompass both quantitative and qualitative assumptions about the future and those environ-

mental factors which are likely to impact upon the institution. Allred suggests that once the council members have constructed the statements, they should distribute them to task force members, knowledgeable community persons and others for review. He suggests using a Likert scale from "most likely to occur" to "least likely to occur". The respondents should be asked to review the statements, rate their likely occurence on the scale, offer revisions and suggest additional assumption statements. This process should be continued until general consensus is reached, and the council members are comfortable in having an adequate basis for institutional planning. (Allred, 1977)

Examples of typical assumption statements might include:

"There will continue to be an increased need for continuing vocational education courses/programs which seek to upgrade the employment skills of individuals."

"With the increase in two-breadwinner families, rapid technological change, and modified work and leisure patterns of individuals, there will be a need to design and implement different program and schedule configurations."

"Within the next three to five years major emphasis should be placed on more effective and efficient utilization of current resources as major increases in expenditures are not anticipated."

As the planning council members examine the range of planning assumption statements which might be constructed, they may refer to the five classifications of assumptions as identified by Lewis (1983). These include:

Long-range — those factors which will affect the school an educational system as a whole for the next 3-5 years or longer

Short-range - those factors which may impact the school or a given program for the next quarter to a year

Noncontrollable — those variables which are external to the school over which the institution has no control, i.e. funding patterns, economic factors, unemployment rates

Semicontrollable —those variables typically internal to the school over which some degree of control or influence can be exercised, i.e. staff turnover, direction of the school

Controllable -- those variables internal to the school over which the institution has a great deal of control, i.e. instructional program, maintenance of building and grounds, public relations image

The construction of the planning assumption statements serves as one of several checks on the validity of plans as it helps to eliminate a considerable amount of the guesswork out of the planning process. The statements also serve as continuing checkpoints for possible revisions of the plans. The development of the assumption statements also serves to help provide direction and focus for the institution as it begins its re-examination of its mission and goals.

Examination of Mission and Goals

The re-examination of the institution's mission statements and goals is absolutely essential in the pre-planning stage. According to Dunham, the mission statement should answer the question: Why does this institution exist? (Dunham, 1977) Moss and Purcel suggest a series of questions which should be posed including, what is the unique mission of the institution? How does its mission differ from the other educational institutions and services, both public and private, within the community? What unique contributions should it seek to make to the local community? to the region? to the state? (Moss and Purcel, 1978)

It is assumed that all institutions have developed a mission statement and goals if for no other reason than to satisfy accreditation purposes. There is a need, however, to re-examine and reaffirm the premises included therein to insure they reflect contemporary needs, concerns, and trends. The development of assumption statements as a backdrop to the re-examination of the institution's mission and goals can be an enlightening experience as one often uncovers glaring omissions in purposes as well as the tenacious hold to concepts and directions which are not longer relevant.

In this examination process, wide spread input should be sought from faculty, staff, advisory committee members, former and current students, business, industry, labor, minority groups and other community leaders.

In a manner somewhat similar to the technique used to solicit input regarding the assumption statements, the mission and goals of the institution might be identified in writing together with those of the local system and/or the state-wide goals for postsecondary and adult vocational education. The respondents could be asked to comment on the appropriateness of the similarities and differences and to rank order the importance of the goal statements. The respondents might be asked to compare their rankings and to examine the reasons for their differences. The review could continue until general consensus is reached.

Upon completion of that process, the mission statements should be viewed objectively to determine the extent to which they are pervasive, far reaching and farsighted. They should be brief but inclusive of the overall unique purpose of the institution.

In the construction of the goal statements, attention should focus initially on institutional as opposed to department or program goals. Goal statements should be broad based and timeless. As such they are rarely measureable as they are not quantifiable. They are supportive of and complementary to the mission statements, and should contribute to the fulfillment of the institution's mission. As one examines the verb of the statement, it should be reflective of the educator's responsibility, role and purpose.

Goal statements identify not only direction, but destination points. They represent the target or general input without any reference to the planning strategies for getting there. Without their identification, however, the institution has no reason to exist, no rudder and no port.

Identification of Resource Requirements

As an institution moves into the second and third cycle of the evaluation, planning and budgeting process, the planning council will become more sophisticated and informed in the identification of the types of resources needed to effectively implement and maintain the process in their respective institution. Among the initial resource needs which should be examined are:

1. Adequate funding to design and administer the process
2. An administrative structure which supports the process
3. Appointment of persons with leadership abilities and expertise in planning, needs assessment and data analysis to key positions for the design and implementation of the process
4. Access to pertinent records and data
5. Information and publications including such items as labor market statistics, state guides, relevant research studies, local Chamber of Commerce reports, APDC reports
6. Adequate access to computer and clerical support services
7. Designated space for materials, publications, working papers and committee meetings
8. Designation of activities as integral part of regular job responsibility with adequate time alloted for the performance of those responsibilities.

It is imperative that an administrative commitment be made at both the state and local levels for the provision of these resources if the staff is to be successful in their efforts. "Penny short and a pound foolish" is a phrase which most definitely should not characterize the resource commitment to this essential process.

Identification of Annual Planning Calendars

The development of the annual planning calendar involves determining the timeline for completion of activities for the annual planning cycle. Local and state due dates for planning information or budget requests shape the planning calendar. (Ausdle, 1980)

The summary timelines and schedules identified in Section II of the handbook should be used as basic guidelines for establishing general timelines and deadlines for the institution. Specific deadlines should be established for each major phase of the process with the planning coordinator and planning council working backwards from those dates to identify interim checkpoints and completion dates for the various task forces, ad hoc committees and individual assignments.

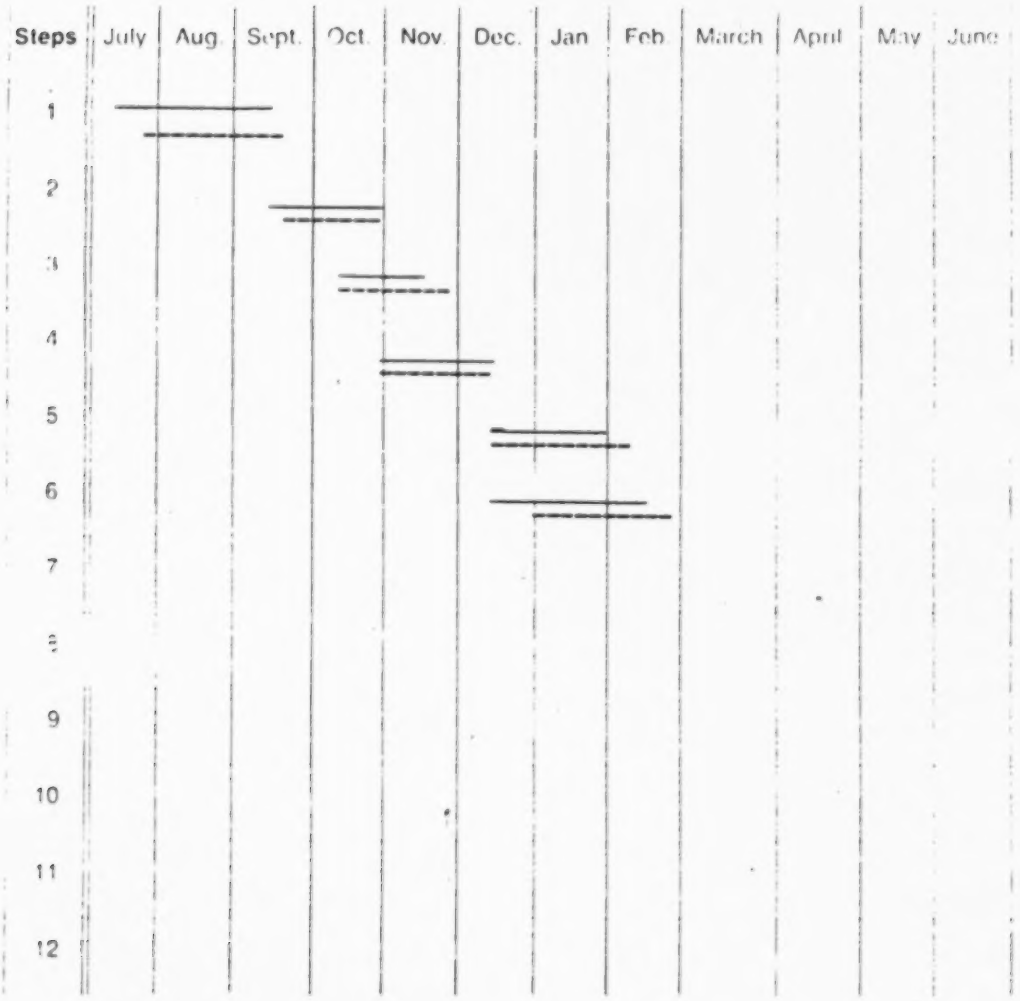
Only through experience and repetition of the evaluation, planning and budgeting cycle can the planning coordinator and planning council become comfortable and realistic in the establishment of interim checkpoints and deadlines. A delicate balance must be found between granting adequate time for the staff to complete their assignments in a manner which generates pride and the availability of adequate time for the planning council to synthesize the efforts of the total team into a coordinated whole.

Once the deadlines are established, however, it is critical that a master schedule of timelines be posted in the resource room and copies furnished to all faculty, staff and external resource personnel involved in the process. As interim checkpoints are met and satisfied, they should be visually noted on the master schedule. One technique which may be of assistance is use of the Gantt Chart. This technique focuses on beginning and completion dates, appropriate sequences of activity, and monitoring of actual performance. Major activities are identified and listed in sequential order along the left side of the chart. A calendar depicting months and/or weeks is shown on the chart with solid lines identifying planned beginning and completion dates. Broken lines shown under the solid lines depict actual beginning and completion dates. By maintaining this visual schedule publicly, time over-runs can be seen immediately and contingency plans developed wherein the institution can meet its non-negotiable deadlines. An example of a Gantt Chart is shown on the following page.

Another management technique which helps in the development of planning calendars is PERT, or Program Evaluation and Review Technique. The PERT network is a schematic model depicting activities and events necessary to complete a project. It involves a task analysis of the overall effort to identify its component parts or activities, the development of a flow plan to indicate sequence, the establishment of schedules and timelines for completing the activities, and the depiction of those elements in a schematic manner. "Think backward", "think small", "think togetherness", and "think time" are all characteristic of PERT. The use of PERT can be extremely helpful in defining work activities to achieve objectives, showing inter-relationships of events and in allocating resources.

GANTT CHART

12-MONTH PLANNING CALENDAR WORKSHEET



_____ Planned timelines

- - - - Actual timelines

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The PERT network shown on the following page depicts a project which has eight major "events" or subparts which must be completed. The final event or subpart of the project effort is identified in the last circle numbered 8. The network as depicted indicates that before subpart #5 can be completed, parts #1 and #2 must be completed first. Likewise event #6 cannot be completed until events #1, #2 and #3 have been completed. The events depicted in the circles show not only sequence but interrelationships as well.

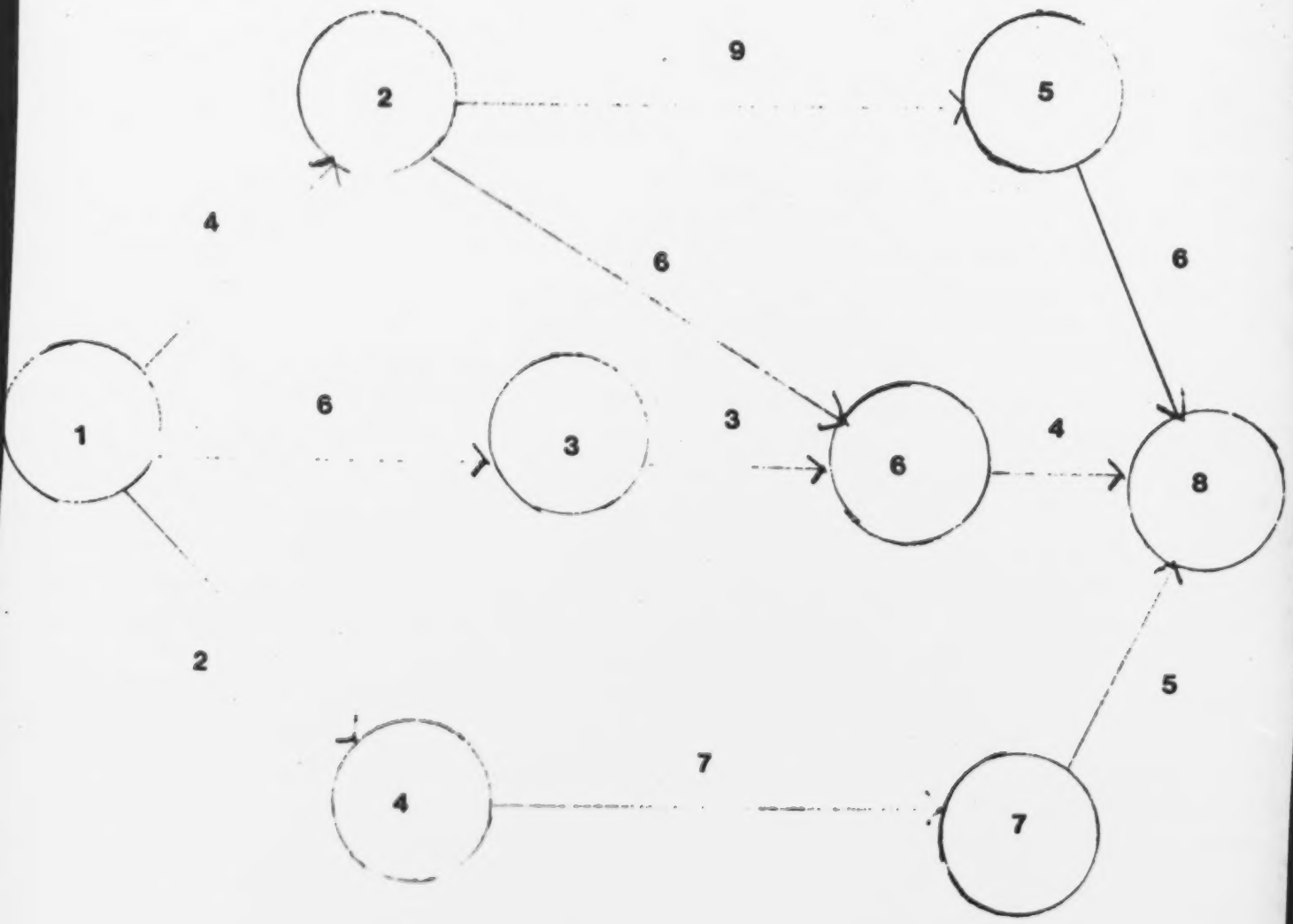
The numbers included on the solid lines indicate time allocations either in days or weeks. For instance, 13 weeks have been allocated to the completion of event or step #5, whereas 9 weeks have been allocated to the completion of event or step #6. The critical path, indicating the sequence of events which takes the longest time to complete, is depicted as the sequence including events #1, #2, #5 and #8 in that 19 weeks are required to complete that sequence as compared to only 13 or 14 weeks in the other "paths". The depiction of these timelines and paths can be of immeasureable help to the planning council and the planning coordinator as they seek alternatives for reducing down-time and assigning staff to assist in peak load periods.

Regardless of the techniques used, it is critical that the planning coordinator together with the planning council establish and publish a planning calendar in the design or pre-planning stage of the process. Likewise, it is equally as important that the calendar and timelines be closely monitored so as to accomplish the objectives in an orderly, timely manner.

Organizing Staff Development Activities

At this point in time, most of the groundwork should have been laid to successfully launch the initiation of the evaluation, planning and budgeting process within the local institution except for one very critical factor: the orientation of the staff and the development of the skills requisite for participating in the process.

A PERT NETWORK



This component may be considered as a major part in the institution's official staff development plan in which case the suggested procedures to be followed in the identification of required competencies, performance appraisals and staff development activities should be utilized. Competency areas most critical to the success of staff performance include evaluation, needs assessment, planning, task analysis, organizing, and legal requirements. Other competency area requirements include team building, situational management, technical report writing, and computer usage. As is the case in the institution's regular staff development program, individual needs and interests should be examined to determine the areas of weakness with staff development programs organized accordingly.

It was stated earlier that participation was the key factor in bringing about a feeling of ownership. Active, volunteer participation, however, is often predicated on the comfort zone of the individual in feeling confident to perform the required activities. A well organized, comprehensive, relevant continuous program of staff development designed to meet the needs of the individuals can help to enhance that confidence level.

Summary

The pre-planning stage is critical to the subsequent success in implementing the evaluation, planning and budgeting system within the local institution. Some refer to this period as "planning to plan" which conveys the concept that philosophy, mission, goals, physical resources, fiscal resources, and competent personnel must be organized and in place prior to initiating this comprehensive effort.

SECTION IV

EVALUATION

IT IS NOT ENOUGH TO KNOW WHERE WE ARE....WE NEED TO KNOW HOW WE GOT HERE!

AUTHOR UNKNOWN

Evaluation is often referred to as determining the worth of a thing for the purpose of making decisions. It should be viewed as a process rather than a product, and as a process, it is continual. It seeks to answer the questions: "where are we?" and "how did we get here?" Thus, evaluation starts with the need to answer some questions or make some decisions. The quality of the answers generated is dependent upon the validity and reliability of the data collection process and the appropriateness of the evaluation measures against which success was judged.

The major outcome of evaluation is the provision of a comprehensive data base upon which plans can be developed which will lead to institutional growth and program improvement. If it is viewed as a punitive process by the participants involved, its value will be mininal to the subsequent processes of planning and budgeting, and, hence, to overall institutional improvement.

The evaluation component of the state model for evaluation, planning and budgeting focuses on two major aspects: (1) the assessment of of-going programs, and (2) the assessment of need for new and/or expanded programs. It is not the intent to outline and define a comprehensive or exhaustive evaluation system, but rather to focus on selected "key indicators" which can provide the basis for a subsequent, indepth followup evaluation at the local level where the need for an extensive evaluation is evidenced.

Assessment of On-Going Programs

In assessing the quality of on-going programs, the evaluation team is using systematic procedures to determine the difference between "what is" and "what should be". That difference may be referred to as a "discrepancy" and constitutes the basis for the subsequent development of followup program improvement plans. Kaufman (1984) states that the discrepancy must not only be perceived or felt by the evaluation team, but it must be substantiated and verified by external reality as well.

Preliminary Assessment

A preliminary assessment of all instructional programs should be conducted annually. As stated previously, the value of the evaluation effort is predicated to a large extent on the appropriateness of the evaluation measures, the external reality, against which success is judged. Three measures or criteria have been identified as providing key indications of the general health of an instructional program in this preliminary assessment process:

1. Enrollment — total enrollment by taxonomy of students enrolled on a full-time basis in occupational education programs (Refer to the current State Board definition of full-time)

2. Completion — the total number of graduates and students who have completed the program with certifiable job skills and who are available for employment

3. Placement — the total number of positive placements identified as the number employed in field for which trained, the number employed in a related field, the number continuing their education, and the number entering the military

In order to help assure the accuracy of these assessments, two aspects of each measure are analyzed: three-year averages per instructor and three-year trend lines per instructor. This enables the evaluation team to determine not only the typical health of a given program over a three-year period of time, but the direction of that health pattern as well. The source of data for these assessments is the unduplicated enrollment report issued in the Fall Quarter of each year by the Management Information System to each respective institution based on the data furnished by the school to the MIS.

The identification of external evaluation measures alone, is not sufficient to judge the quality of a program, nor to come to an objective conclusion relative to the level of that quality. As stated in Section II of the handbook, evaluation should help answer the questions, "how am I doing" and "am I doing things right". To answer those questions, "right" or acceptable performance must be defined. The identification of acceptable performance is presented in the form of standards which become the yard-sticks against which a program's quality or success can be concluded.

The model incorporates standards for each of the evaluation measures previously identified. Refer to Appendix A for an identification of the current state standards. Three levels of quality are defined for each standard, which, summatively, enables the evaluation team to arrive at an objective conclusion of that program's quality by classifying it into one of three established categories:

Category A -- represents those programs of exceptional quality which exceed state standards (Refer to Appendix A for the current weighted index standards to be used in the summative classification of programs)

Category B -- represents those programs of acceptable quality in that meet state standards

Category C -- represents those programs which fail to meet state standards and which need major modification. Categorization as "C" for a second consecutive year results in its designation as probationary; third year consecutive year categorization results in termination unless special one-year extension is approved by the State Board

Programs summatively clssified into Categories A and B require no specific followup plan of activity. This is not to suggest, however, that no improvements are needed. A professional conscientious instructional team will actively seek ways to not only maintain the quality of the program, but to improve its effectiveness as well. Programs classified in Category C require a secondary assessment for the purpose of identifying clues for its deficiencies.

Secondary Assessment

Although the preliminary assessment may be conducted by the instructional staff together with the instructional coordinator, it is suggested that the evaluation team for the secondary assessment be enlarged to include members of that program's craft advisory committee, former students, and, where possible, instructional staff members in comparable programs from other institutions. With the ultimate outcome sought being program improvement, every effort should be made in the assessment process to obtain as much input as possible from all concerned parties as to the possible causes of that program's deficiency.

Five additional measures are included in the model for use in the secondary assessment process:

1. Employer Evaluation of Students -- Annual employer evaluation conducted by the State MIS system in cooperation with the local school to determine the employers' assessment of such items as technical knowledge, work attitude, work quality, relative preparation and overall rating of student performance.

2. Student Evaluation of Program — Annual student evaluation of program conducted by state MIS system in cooperation with the local school to determine the students' assessment of such items as job preparation, instructional content, tools and equipment, teacher presentations in class, teacher presentations in laboratory, organization of instruction, grading and testing procedures, interest of the instructor, and class size.

3. Assessment of Facilities -- Annual assessment of appropriateness and condition of program facilities as determined by a team composed of the instructional coordinator, instructor, advisory committee member and others as may be designated locally, using an established instrument.

4. Assessment of Equipment and Instructional Materials -- Annual assessment of appropriateness and condition of program equipment and instructional materials as determined by a team composed of the instructional coordinator, the instructor, an advisory committee member and others as may be designated locally, using an established instrument.

5. Assessment of Business Support and Participation -- Annual assessment of the extent to which the business/industrial community have supported the program and the extent to which business representatives have participated in designed program support activities. This assessment is conducted by the instructional coordinator together with the instructor using an established instrument.

Refer to Appendix B for the currently approved instruments and forms to be used in conducting these assessments.

As noted previously, the model does not purport to provide the elements for conducting a comprehensive evaluation of a given program. If that were the case, attention would be focused on the use of the CIPPI approach which would incorporate evaluation measures, standards and procedures for assessing the context, input, process, product and impact of that program. The primary purpose here is to identify those key factors which are most likely to provide clues for the program's deficiency.

If after conducting this secondary assessment, the evaluation team feels unsure of its diagnosis, they may choose to probe further in seeking to identify those factors contributing to the current condition of the program. In this probing, the team might conduct an internal and an external examination.

The internal examination might focus on such factors as: recruitment and promotion efforts designed to attract students to that particular program; program admission policies and procedures; typical entry level skill of students compared to curriculum expectations; accessibility of pertinent guidance and counseling services and materials including remedial instruction support services; availability of financial aid; time of day or evening at which the program is offered; location of the program; administrative support provided; or information gleaned from exit interviews of staff and students, especially early leavers. These looks are, of course, over and above those relating to the appraisal of instructor competency and performance included in the school's personnel management and staff development program.

The external examination might focus on changes in employment demand, economic conditions of the community and region, availability and use of community resources, typical wage and salary levels of program graduates or completers, social value placed on occupations for which training is being offered, community awareness of program's availability and purpose, and public relations image of the institution and of the given program within the community or service area of the school.

The importance placed on the secondary assessment and followup examinations and the seriousness devoted to the process will be reflected in the quality of the data which must be used as a basis for planning subsequent corrective action. If the assessment is conducted in a perfunctory manner, it is doubtful that the corrective action outlined will be appropriate for restoring the quality of the program.

Three basic alternatives should be considered in analyzing the data collected in this process:

> "Should we maintain the program, but strive to improve its quality through specifically identified program improvement strategies?"
>
> "Should we maintain the program, but modify it significantly by altering its basic thrust, focus or purpose?"
>
> "Should we initiate phase-out plans for the purpose of terminating the program in an orderly manner?"

Each of these alternatives should be examined closely. The evaluative data collected in the assessment process should provide the basis for the examination of these alternatives. In so doing, the need for additional data may be revealed. As each alternative is examined, consideration should be given to the following:

1. How each alternative will impact on the achievement of the institution's overall goals and objectives
2. The estimated effectiveness of each alternative
3. The resources necessary for implementing each alternative
4. The political consequences of each alternative

The implications and consequences of each alternative should be explored in depth. The evaluation team might begin with the brainstorming technique to elicit as many suggestions as possible. As each alternative is considered, followup solutions should be identified. Creativity and the use of the team members' imagination should be encouraged in giving the team free reign to suggest possible solutions and what the implications of those solutions might be. The purpose at this point is to answer the question "where do we want to go?" The desgination of that destination point provides the basis for the followup plan in determining "how do we get there?"

Needs Assessment for New and Expanded Programs

If the institution is to be responsive to employment demand, it must conduct periodic, in-depth assessments to identify and document those employment needs. Sound, accurate data must be furnished to justify the need for new and expanded programs, particularly where such initiatives require significant increases in public resources. Although a substantial amount of that data should be available at the state level, it is the responsibility of the local institution to identify and substantiate that need locally.

The model includes the identification of six key measures which should be used as a minimum in assessing the need for new and/or expanded programs. Additional measures may be identified by the local institution as may be appropiate for a given situation. The six measures include:

1. State-wide Employment Trends -- increased, decreased or stable employment trends evidenced on a state-wide basis for the occupationa(s) under consideration as determined by the Department of Labor, the State Board for Postsecondary Vocational Education, or other sources as may be identified by the staff of the State Board.

2. Unmet Need Within 50 Mile Radius -- the difference between employment demand (including additions and replacements) and estimated employment supply for the occupation(s) under consideration within a 50 mile radius of the school as determined by the staff of the school using instruments and procedures approved by the staff of the State Board.

3. Estimated Start-Up Equipment Cost -- the total cost estimated by the staff of the State Board to either initiate a new program in a designated occupational area and/or to expand a given program using state-wide average cost figures for individual instructional programs as provided by the staff of the State Board

4. Estimated Annual Operating Cost -- the total cost estimated by the staff of the State Board to operate a designated instructional program for a year using state-wide average cost data for individual instructional programs as generated from a uniform cost accounting system implemented in the state-wide network of area vocational-technical schools

5. Estimated Cost Per Placement -- the total cost estimated by the staff of the State Board per positive placement in a designated instructional program using state-wide average annual operating cost data and placement data furnished by the MIS.

6. Evidenced Local Business/Industry Support for Proposed Program -- the interest and support of the business and industrial community within a 50 mile radius of the school as evidenced on survey instruments approved by the staff of the State Board and used by the staff of the local school to identity unmet need.

Of the six data elements identified, only two are the direct responsibility of the local institution, namely, the determination of unmet need within a 50 mile radius of the school and the documentation of evidence of local business and industrial support for the proposed program. Although the determination of state-wide cost averages is the responsbility of the staff of the State Board, the input data must come from the cost accounting records of the individual institutions.

Determination of Unmet Need and Community Support

In the identification of unmet need as justification for the establishment of preparatory programs, attention is focused exclusively on replacement demand and demand for new or additional workers. The justification for supplementary programs is based on an analysis of current employment. The reason for this focus is logical in that preparatory programs produce persons who must find employment either as a replacement for someone who has left a firm's employment or as an additional worker hired as a result of a firm's expansion effort. Supple-

mentary programs, on the other hand, are designed to meet the needs of employed persons for upgrading purposes.

The other side of the ledger focuses on the available supply of trained persons in the geographical area. Like the identification of projected demand, supply estimates may be difficult to obtain as it includes supply generated from all public and private schools offering programs comparable to those under consideration, as well as the supply which may come from the military, from correctional institutions, and from the in-migration of trained personnel to the area.

The difference between demand, as defined above, and the available supply is referred to as unmet need and provides the basis for the most important evaluative measure to be used in the justification of the need for new and expanded programs by the local institution.

With these concepts clearly in mind, the evaluation team should prepare for the organization of a community survey. Since this element is crucial to the institution's justification for new thrusts, it is essential that the survey be appropriately organized and conducted and that the resources necessary for its successful implementation be identified and allocated to the team.

The organization of the evaluation team for this effort requires a considerable amount of pre-planning activity. The primary purpose of this activity is to conduct a preliminary assessment of employment demand to pre-screen those occupational areas which should be surveyed. It goes without saying that it is beyond the scope of an institution to conduct a comprehensive analysis of all occupational areas within its respective service area. Rather, it is more efficient to concentrate on those areas which project the greatest potential for demand and for which available supply appears to be proportionately low.

One of the major data sources which should be perused initially is the State Board's summary of state-wide employment trends supplemented by such information as data from the Department of Labor, the Department of Commerce, the Department of Industry and Trade, the Agricultural Extension Service, local chambers of commerce, management offices of industrial parks and shopping malls and various private employment agencies. Publications which can be of help include the Occupational Outlook Handbook, Tomorrow's Manpower Needs, Manpower Report to the President, and the current State Plan for the Administration of Vocational Education. All data studied in reference to the first key measure identified in the model as justification for new and/or expanded programs, namely, state-wide employment trends, should provide a major basis for the determination of those occupational areas which should be surveyed locally.

Once a tenative list of some eight-ten areas have been identified, preliminary interviews with local employment agencies and local chembers of commerce, together with structured observations of the service area should reduce the list to some five-six areas for in-depth study.

The next major step to be conducted is the identification of the specific occupations for which data are to be collected. Every effort should be made by the evaluation team to identify alternate occupational titles for the same occupation as few firms call the same job by the same title. This is a critical step in the process, as the school must focus on those jobs for which it is appropriate that training be provided.

If, for instance, the occupation requires little or no training to obtain and perform, and if the job pays no more than minimum wage, some economist would question the justification of public expenditure for job preparatory programs in those occupations. On the other hand, if the occupation requires a baccalaureate degree, it is prohibited to use federal funds for those occupational training programs. Thus, attention should be focused not only on entry level jobs for which more than minimum training should be provided, but those supervisory level or technical level of jobs as well. For example, if hotel training were one of the

occupational areas to be surveyed, attention should be placed on such occupations as reservations clerk, cashier, front-desk manager, sales manager and executive housekeeper.

Once the specific occupations have been identified within a select number of occupational areas, the next step is the identification of major firms within the area at which the survey will be conducted. In smaller service areas, efforts could be made to survey all of the firms which hire persons in the occupations identified. More often, however, such cannot be done. Instead, a stratified sample should be identified in order to assure representative from the following:

* the total service area
* large firms as well as small firms
* private firms as well as public firms
* single establishments as well as regional or national chains
* unionized as well as nonunionized firms

The yellow pages of the telephone books in the service area together with information from the tax assessors office can be quite helpful in this identification process. From this analysis, the specific company name, address and telephone number should be recorded. A telephone call to the firm's principal should help to identify the name of the specific individual(s) who should be contacted.

With specific occupations selected, representative firms identified, and individual persons to be surveyed selected, the team is ready to select the method(s) which will be used in conducting the survey. Three major methods are, of course, available to the team: mail questionnaire, telephone interview and personal interview, or a combination thereof. If the number of firms to be surveyed within a given occupational area is small, then major consideration should be given to using the personal interview. If the number is somewhat larger than can be handled comfortably by the team members available for the job, a combination telephone and personal interview might be considered. Or if the number is quite sizeable, using the mail questionnaire together with the personal or

telephone interview might be used. The primary objective should be to obtain as much data as possible from as many firms as possible, but the emphasis is on accurate data and maintaining the public relations image of the institution. Thus, the scope of the effort must be manageable in a quality manner.

At this point, the evaluation team is ready to identify the activities necessary to complete the survey, establish timelines, and identify individual or sub-committee responsibilities. The use of the planning forms included in the next section might be helpful to the team in this process.

If the mail questionnaire method is selected, attention should be given to the following suggestions:

* Pilot the enclosed survey form with selected persons in the occupational areas identified.
* Revise the instrument as may be needed.
* Call the contact person to whom the instrument is to be sent prior to the mailing to alert him/her of your purpose and to solicit their cooperation.
* Develop a cover letter stating the rationale for the survey and the benefits which they can subsequently accrue from participating.
* Duplicate the survey instrument on yellow paper rather than white or another color.
* Enclose a self-addressed, stamped envelope. If some of the school's advisory committee members and/or business sponsors can provide a premium of some type, e.g. coupon for a free hamburger at Wendy's, then enclose that as well.
* Place a large commemorative stamp on the outside envelope; DO NOT use metered postage.
* Address the envelope to the "attention of" a specific individual; DO NOT send to a "blind" position nor use a mailing label.
* Code the survey instruments so as to identify respondents and non-respondents for followup purposes.
* Mail the survey on a Monday.
* Followup the non-respondents with a telephone call and second mailing after a ten-day period.
* Followup the remaining non-respondents with a telephone interview after a second ten-day period.

Should the decision be made to use either the personal or telephone interview technique, attention should be given to the following:

* Pilot the enclosed instrument with selected persons representing the areas to be surveyed.
* Revise the instrument as may be needed.
* Call the contact person prior to the interview to explain the reason for the purpose, to solicit their cooperation, and to set an appointment time for the interview.
* TRAIN THE INTERVIEWERS including the following:
  - standard introduction to include rationale for survey and benefits which interviewee can subsequently accrue
  - total familiarity with the instrument, the data items called for and suggested responses for typical questions
  - courtesies in notetaking and interviewing
  - proper closing and expressions of appreciation
  - proper dress
  - role-play the interview
  - acknowledgement of fact that interviewers will serve as "image makers" and "goodwill ambassadors" of the school so every effort should be made to make the most favorable impression possible.

Whether an interview method or the mail questionnaire is used, the evaluation team should work closely with a computer specialist in the school in developing a computer program wherein all data can be entered and tabulated with a minimum of difficulty. To be useful in making management decisions, the data must be tabulated in an accurate manner. That can best be achieved via computer application. Another advantage is that it can be stored on computer tape and used for other future purposes or as a comparative basis for future surveys.

In conducting this type of survey, attention should continuously be focused on the purpose of the survey which, for preparatory programs, is to determine replacement and additional demand projections for given occupations within the service area. Needs assessment efforts to provide data relative to supplmentary offerings require totally different types of instruments and procedures. Too, needs assessment efforts for curriculum planning purposes also require an entirely different type of analysis. These purposes should not be combined for a single survey effort. To do so will most likely result in the collection of data which will be of little value in answering any one of the objectives, much less all three.

In conducting the survey to determine the justification for preparatory programs, however, one compatible purpose is that of identifying the extent of industry support for the proposed program. Question #5 on the suggested employment demand survey instrument included in Appendix C will help the evaluation team determine that support. That item can, of course, be supplemented with additional questions particularly appropriate to that given occupational area within that community.

Once the data elements have been collected, they should be reflected on the summary forms similar to those included in Appendix C. These summarize employment demand, including replacement and additional demand, for a given occupational area. Upon obtaining the supply estimates from schools within the area and/or from trend lines evidenced by the local employment agency or by the firms themselves, the unmet need projections can then be determined. The suggested form for making this analysis is also included in Appendix C.

Completion of these steps will provide the primary data base for making local and state decisions relative to program initiation and/or program expansion. It goes without saying that every effort should be made to assure the accuracy and comprehensiveness of this data base.

Cost Analyses

"Cost analysis evaluation is the least developed and most thoroughly complicated form of evaluation to be encountered by the educator." (Wentling, 1980). However, it is a type of evaluation which is becoming of increased importance. Both the general public and the Legislature are calling for accountability and increased cost efficiency in the operation of educational programs. With vocational education programs heading the list in cost within education, it behooves the postsecondary vocational education institutions to place increased attention on this major aspect in program evaluation and planning.

An analysis of costs provides a more objective basis for the assessment of program efficiency and for the determination of cost expenditure for new or expanded programs. Among the other advantages or benefits which can be derived from cost analysis are:

(1) to justify resource allocation decisions

(2) to promote better utilization of facilities

(3) to determine optimum staff or manpower assignments

(4) to determine optimum scheduling or sequencing

(5) to determine optimum load for a particular program

(6) to decrease costs of high-cost/low-incidence programs

(7) to determine the advisability of financing the development of a new program

(8) to compare alternative programs, and

(9) to provide fiscal accountability (Wentling, 1980)

Although numerous types of cost studies can be undertaken, the three most common types include cost determination, cost-benefit, and cost-effectiveness. Each type listed respectively becomes of increased complexibity as cost-benefit studies build on data gathered in cost determination studies, and cost-effectiveness studies build on data collected in cost-benefit studies. All studies, however, are predicated on the use of a sound, accurate cost accounting system.

Two of the criteria or key indicators for justififying new or expanded programs included in the model fall into the classification of cost determination: estimated start-up equipment cost and estimated annual operating cost. One of the criteria requires an abbreviated cost benefit study, namely, estimated cost per placement.

In cost determination studies, the objective is simply the identification of costs associated with a given unit. It may, for example, refer to the cost associated with the development of a new curriculum guide, the total cost associated with operating a guidance and counseling center within a school, the cost incurred in developing a new program, or the cost incurred in operating a program. One of the major purposes of conducting a cost determination study is to provide a basis for comparison in cost outlays and to provide a basis for more sophisticated cost studies.

In identifying estimated start-up cost for equipment, the primary data source is the inventory of equipment including the identification of equipment items, cost, and estimated life. Considerable care must be taken in reviewing the computerized inventory printout furnished by the State to ascertain the following:

(1) that all equipment identified has been charged to the appropriate program

(2) that all major equipment items have been included

(3) that the item costs are accurate

(4) that the faculty and staff are in agreement with the assigned life expentancy based on the nature of the given program within the school

In addition to the State equipment inventory printout, however, the school should account for and charge to the respective programs those equipment items whose costs are less than the amount required for state inventorying purposes. In many instances, the cost associated with these equipment items may account for over 50% of the total equipment cost for a given program.

With each institution following the above minimum procedures, the State Board staff can determine state-wide equipment cost averages for each of the programs offered in the State. It is critical that such a list be continuously reviewed and updated, however, to reflect not only changes in cost, but changes in curriculum thrusts as well.

The other cost determination criterion identified in the model is likewise the responsibility of the staff of the State Board to provide, namely estimated annual operating cost. Their provision of this data, however, is also dependent upon accurate input from the respective schools' use of a uniform cost accounting system. Consideration should be given to the identification and inclusion of such costs as the following in the determination of annual operating costs:

Equipment cost — total cost of the equipment divided by average age per instructional program

Instructional salaries — total salary cost including fringe benefits directly assigned to a given program

Travel -- travel cost associated with the operation of each given program

Staff development cost -- cost for in-service training incurred directly or indirectly by the staff of a given program

Maintenance and Operation -- utility, janitorial and other maintenance cost associated with the operation of a given program

Supplies and Materials -- supplies typically consumed in the conduct of the instructional program or which have a limited life

Non-instructional support services -- pro rata cost for administrative and support services of the school

Miscellaneous costs -- other costs incurred by a given program not assigned to other cost categories

The designation of instructional programs, support services and administration as individual cost centers with the identification of both direct and indirect costs is the first major step which should be taken in the development of a cost accounting system. This will also enable the local institution to identify fixed and variable cost per cost center. Through this cost analysis, a school can then determine the actual operating cost of each given unit within the school. Only through the development and use of such a data base can fiscal accountability become a reality.

The identification of the third key cost criterion, estimated cost per placement, should also be obtained from the staff of the State Board based on state-wide data. As stated previously, this represents an abbreviated cost-benefit study in that it builds on the data base established from the two cost determination items. If estimated start-up equipment cost have been determined along with estimated annual operating cost, the estimated cost per placement should be a mathematical calculation. Annual placement data should be state-wide program averages as reflected in data from the MIS reports.

Weighted Index System

The data obtained from an assessment of the six criteria or key indicators included in the model for justififying the need for a new or an expanded program can be of more value in the decision-making process

through the use of a weighted index system. In this process, a weight representing a value is assigned to each of the six criteria so as to present a profile of those factors in priority order or weighted order of importance. Each of these weights is subsequently divided into three values representing the comparative weight of each alternative program relative to each criterion. For example, upon the establishment of estimated startup equipment costs for all programs, that composite list can be sub-divided into three categories of high cost, medium cost and low cost programs. This subdivision can be done mathematically with one-third of the programs falling into each of the three categories.

The same approach can be followed in the assignment of values to subcategories for each of the other key indicators or criteria. In assigning sub-values to the three categories established for each criterion, however, note must be made of those factors which represent an inverse relationships as opposed to those which represent a direct relationship. To illustrate, those criteria relating to cost have an inverse relationship, i.e. the higher cost, the least the advantage; the lower the cost, the higher the advantage. Thus, the programs falling into the high-cost category would receive the lowest weight, while the programs falling into the low-cost category would receive the highest weight. In contrast to these inverse relationships, however, the criteria relating to statewide employment trends, unmet need and community support reflect a direct relationship, i.e. the greater the unmet need, the higher the weight.

The weighted index proposed in the model is reflected on the following page. Through the utilization of such an index, an objective total index weight can be determined for each proposed program with priority given to those programs having the highest weight.

As stated previously, it is axiomatic that a system for the objective prioritization of needs and subsequent budget requests for new and expanded programs be developed in light of the continued anticipation of limited public resources. The credibility of the local institution and the statewide system in answering the charge for fiscal accountability is predicated on the establishment and use of such a system.

EVALUATION: NEW AND EXPANDED PROGRAMS
STANDARDS AS USED IN A PROPOSED WEIGHTED INDEX

INDICATOR	PROPOSED WEIGHT
State-Wide Employment Trends	9
Unmet Need Within 50 Mile Radius of School & Community Support	12
Estimated Startup Equipment Cost (Inverse Relationship)	3
Estimated Annual Operating Cost (Inverse Relationship)	3
Estimated Cost Per Placement (Inverse Relationship)	3

52

WEIGHTED INDEX TABLE

PROGRAM RATING (DIRECT)	STATE-WIDE TRENDS (9)		UNMET NEED (12)		PROGRAM RATING (REVERSE)	EQUIPMENT COST (3)		OPERATING COST (3)		COST PER PLACEM. (3)		TOTAL INDEX WEIGHT
High	3	27	3	36	Low	3	9	3	9	3	9	90
Medium	2	18	2	24	Medium	2	6	2	6	2	6	60
Low	1	9	1	12	High	1	3	1	3	1	3	30

Summary

The evaluation component of the process provides the data base for decision-making and planning. The data collected in the assessment of on-going programs provides the backdrop for the outline of corrective action to be reflected in program improvement plans. Inaccurate diagnoses and/or emphasis on symptoms rather than causes can result in ineffective followup action. The evaluation component is likewise crucial to sound decision-making for new and expanded programs. The collection and synthesis of accurate data provides the basis for increased efficiency in the decision-making process. Most important of all, perhaps, the evaluation component provides anwers to the question: "where are we" which must necessarily precede the question, "how do we get to where we want to go?"

SECTION V

PLANNING AND BUDGETING

IT IS NOT ENOUGH TO BE BUSY...THE QUESTION IS: WHAT ARE WE BUSY ABOUT?

THOREAU

With the mission and goals clearly in mind, and with the current status and need identified, the next step is the identification of those strategies which will enable the institution to "close the gap" between desired performance and current performance. The questions, "where are we" and "where are we going" have been answered. The question to be addressed now is "how do we get there?"

Identification of Program Goals

The mission and goals of the institution have been determined, but how do the goals of the individual program areas and instructional programs relate and contribute to the institutional goals? Are the program goals complimentary to those of the institution? Will the accomplishment of the program goals contribute to the accomplishment of the goals and mission of the institution?

The same characteristics apply to the statement of program goals as are those applicable to institutional goals, namely:

...broad based

...timeless

...non-quantifiable

...responsibility of the educator

The only difference is in the specificity of the goal as it relates to a given program area or instructional program, i.e. business education (program area), information processing (instructional program); marketing education (program area), hotel-motel management (instructional program).

An example of an institutional goal with parallel program area and instructional program goals might be:

Institutional Goal:	To offer an array of vocational-technical programs and services relevant to employment demand and student need
Program Area Goal:	To offer an array of programs and services in business education relevant to employment demand and student need
Instructional Program Goal:	To offer a program in information processing relevant to employment demand and student need

Each of the goal statements is broad based, timeless, essentially non-quantifiable and the verb, "offer", designates them as the responsibility of the educator.

At least two program area goals are essential and should be parallel to those of the institution. One goal should specifically address the provision of preparatory programs to enable persons to obtain and advance in employment. A second goal should specifically address the provision of supplementary offerings for retraining and upgrading which will enable persons to maintain employment.

Identification of Institutional and Program Objectives

The development of objectives serves to identify the interim checkpoints or stops en route to the final destination. As such, it is essential that objectives be complimentary to and supportive of the established goals. The accomplishment of the objectives should contribute to the ultimate achievement of the goals. Thus, it is essential that institutional objectives be specifically related to institutional goals; that program objectives be specifically related to program goals; and that the program objectives and goals contribute to the attainment of institutional goals.

Unlike the characteristics of goals, objectives are characterized by:

...being specific

...being quantifiable in most instances

...being achievable within a designated time period

The only characteristic in common with goals is that the objective is also the responsibility of the educator. Attention is placed on this critical characteristic because of the common mistake made by many institutions in confusing curriculum (student) goals and objectives with program goals and objectives. The clearest indicator in that differentiation is the verb. The verb in the statement of program goals and objectives must be performed by the educator, whereas the verb in the statement of curriculum goals and objectives must be performed by the student.

An example of an institutional goal with supportive objectives might be:

Institutional Goal: To offer an array of vocational-technical programs and services relevant to employment demand and student need

Institutional Objectives: To conduct a local needs assessment survey in at least two program areas to determine employment demand by December 1, 19__.

To conduct an in-depth evaluation of at least three program areas to determine their current relevancy to employment demand by December 1, 19__.

The same parallels might be found in the statement of goals and objectives in a given program area. For example:

Program Area Goal: To offer an array of programs and services in business education relevant to employment demand and student need

Program Area Objectives: To conduct a local needs assessment survey in the area of information processing to determine employment demand and job requirements by December 1, 19__.

To conduct an in-depth evaluation of the secretarial practices program to determine its current relevancy to employment demand and job requirements by December 1, 19__.

The statement of these objectives reflect the essential characteristics of objectives in that they are specific, are quantifiable, have designated timeframes for their completion and are the responsibility of the educator. Further, each objective is expressly supportive of the respective goal statement.

There are two major classifications of program objectives: those which focus on program improvement, and those which address program expansion or development. Objectives which support program improvement might focus on such areas as program evaluation including explicit assessment of the curriculum, facilities, equipment, instructor, entry level skills of typical student, availability of appropriate support services for students enrolled, or employment demand for program. Program improvement objectives should, of course, also focus on corrective action, e.g. curriculum revision, program modification, facility renovation, equipment replacement, staff development activities for the instructor, the development of a vestibule training module as a required requisite for program entry. If an assessment of employment demand indicates little or no demand with none projected, then the objectives might focus on the orderly phase-out or termination of the program.

Program objectives which focus on program development/initiation or expansion might address the conduct of needs assessment surveys including assessment of employment demand, job requirements, equipment needs, instructor qualifications needed, and program design models. Other program development objectives might focus on design and construction/renovation of facilities, selection and purchase of equipment, curriculum development, recruitment and selection of instructional staff, program promotion and recruitment of students, development of advisory committees.

The list of examples given above is not exhaustive by any means. The identification and development of specific objectives is, of course, predicated on the needs and circumstances unique to the local institution. When identifying objectives for those programs classified as "C" in the assessment process, however, the focus must be on program improvement and the specific corrective action which the institution plans to conduct to "turn the program around" and bring it up to state standards. These program objectives and planning strategies are incorporated in the Program Improvement Plan which the institution submits to the staff of the State Board for Postsecondary Vocational Education. Objectives and planning strategies relating to program development are reflected in the Program Initiation/Expansion Plan which is also submitted to the State Board.

Identification of Planning Strategies

The identification of planning strategies specifically focuses on the "how to do it". It addresses the questions of "what must be done to achieve the objectives?" "In what sequence should those actions be performed?" Or, "how do we get there from here?"

These questions are best answered by conducting a modified task analysis of the objective, i.e. identifying the specific tasks or activities which must be performed to achieve the objective. This can, perhaps, best be accomplishment if it is conducted in two stages: (1) identify the major steps which must be taken to get the job done . These might equate to the identification of job duties in a task analysis. (2) Identify the activities which must be performed to complete each step identified. These activities are generally analogous to tasks.

An example of this might be:

Program Area Objective: To conduct a local needs assessment survey in the area of information processing to determine employment demand and job requirements by December 1, 19__.

Major Steps:
Organize team to conduct survey
Identify business firms and agencies to be surveyed
Develop survey instrument
Conduct survey
Analyze the results
Prepare recommendations related to survey results

Major Activities: Organize team to conduct survey:

Identify types of persons to serve on team including business reps and educators
Identify specific individuals with expertise in field
Invite individuals to serve on team
Plan orientation/organization meeting
Conduct meeting
Summarize in writing team organization and team member responsibilities

It is important that the "front-line unit" or group who has the responsibility for actually performing these tasks take the time to identify the

activities as comprehensively and as finitely as possible. Most time delays and missed deadlines can be attributed to oversights in not being aware of nor planning for the array of tasks which must be performed to get a job done.

When the list of activities is first generated, concern should not be given to the order in which they will be performed. It should, instead, be approached as a brainstorm session in which as many ideas as possible are generated. Once those ideas have been exhausted, then a second or third look should be taken at grouping those ideas into common categories or components, i.e. grouping ideas which relate to the same activity. Once that process has been completed, then the group is ready to identify the orderly sequence in which those activities should be performed.

Care should be taken here that all activities are not identified as being inter-dependent requiring sequential performance. Instead, every effort should be made to identify those activities which can be performed simultaneously with others. If equal attention is placed on efficiency as well as on effectiveness, then efforts will be made to shorten the time requirements for completing a given job. This necessarily requires the simultaneous performance of several activities whenever possible. The use of PERT can be quite helpful to the planner at this stage in that it helps to present schematically the relationship of the activities.

In considering the efficiency/effectiveness issue, careful consideration should should also be given to the selection or designation of specific activities from among the alternatives available. For example, several alternatives are available in conducting an employment needs survey. The design of the survey instrument and the activities pursuant to that end are dependent upon the alternative selected, e.g. structured interview instrument or mail questionnaire. In inviting business representatives to serve on an ad hoc planning team, from whom should the invitation come and how should the invitation be presented? from the instructor? in writing? The designation of specific activities represents decision-making; thus, care should be taken to assure that appropriate decisions are made.

Establishment of Timelines

Upon completion of the activities outline, the planner is then ready to identify the estimated timelines needed to perform the activities. If the planning coordinator together with the planning council have established major timeframes, and if the planner has been deliberate in sequencing the steps and activities necessary to complete the job including the identification of activities which can be performed simultaneously as well as those which must be performed sequentially, then s/he should have little problem in establishing the operational timelines.

At this point, it is critical that the team leader interface with the planning council and/or planning coordinator. If comparable types of efforts have been planned by other teams, then consideration might be given to combining that team effort into a single thrust. This may be especially helpful if the activities involve multiple contacts with the same business firms or individuals within the community. Too, such combined effort can be a savings in time, money and human resources.

In establishing timelines, it is important that both beginning and ending timelines be identified. This helps to identify sequence, estimated startup dates, time alloted for completion of the activity, and deadlines. Once the activities are sequenced, they can be numbered and depicted on a Gantt Chart. Prominent display of that chart can serve as a constant reminder to the planner of the work remaining to be completed.

Specification of Staff Assignments

In many instances, plans go by the board because no one was assigned the specific responsibility for its implementation. Although a planning coordinator and a planning council have been identified together with team leaders, the assignment of staff responsibility cannot end at that point. If the plan is to be successfully implemented, then it is imperative that the responsibility for performing the individual steps and/or activities identified therein be specifically assigned to designated staff members.

Staff assignments are, of course, dependent upon individual expertise and interest. Every effort should be made to make appropriate matches of individuals to responsibilities. At the same time, however, care must be taken in not overloading the ambitious, competent staff member while others sit idle. Thus, a balance in workload is important. So, too, is the need to focus on the professional growth and development of the staff member. Repetitive assignments year after year can not only be boring, but can also contribute to a decrease in morale because of the lack of challenge to the individual. The simultaneous achievement of organizational and individual goals is largely predicated on the designation of appropriate staff assignments.

Identification of Evaluation Measures

The evaluation measures are the visible outcomes, products or changes which signify the achievement of the objective. If the objectives have been stated appropriately, the evaluation measures may be identified within the statement of the objectives themselves. For example, if the objective calls for the completion of an employment demand survey in a particular program area by a given date, the evaluation measure may simply be the completed survey report. If the objective calls for the revision of a given curriculum by a given date, the evaluation measure may be identified as the revised curriculum guide, printed and in place for use by the instructor.

One might ask, if the evaluation measure is so obvious, why is it needed? That question can be answered in several ways. First, it provides added insurance that the planner will focus on outcome as his/her objective rather than process. Second, it places emphasis on tangible outcomes which are visible to third parties, and third, it can serve as a management control tool for performance appraisal.

Presentation of the Operational Plan

The operational plan includes the assembly of all of the bits and pieces described within this section of the Handbook. It serves as the working paper for a team, program or unit within the institution. An example of one type of format which might be used for this presentation is shown on the next page.

OPERATIONAL PLAN

Unit/Department/Team _____ Team Leader _____

Program/Institutional Goal: _____

Program/Institutional Objective: _____

STEPS & ACTIVITIES	TIMELINES		STAFF PERSON RESPONSIBLE	EVALUATION MEASURE
	STARTING	COMPLETION		

62

71.

72

Budgeting

One of the major purposes and outcomes of an effective planning process is that it shape budget decisions. Ausdle (1980) suggests that the budget be considered the financial version of the plan. He further states that if the budgeting process is not tied directly to planning, planning may be viewed as a meaningless exercise since its payoff for the institution and for the individual will be minimal.

The budgeting process may be subdivided into two major categories: (1) budgeting for new and expanded programs, and (2) budgeting for on-going programs including those requiring improvement or major modification.

Budget Projections, New and Expanded Programs

One of the most helpful tools which can be used as a basic reference to the planner in identifying budget projections for new and expanded programs is what is referred to as educational specifications. These are, in essence, educational as opposed to architectural blueprints which outline the needs of a proposed program. Although the specific format may vary, educational specifications typically include the following components:

Curriculum Goals -- identify the major student outcomes of the curriculum with focus on those which relate to the uniqueness of the curriculum, i.e. development of competencies required for gainful employment in auto mechanics.

Curriculum Objectives -- identifies the major student performance outcomes typically drawn from unit objectives within the curriculum, i.e. demonstrate competency in trouble-shooting, maintaining and replacing braking systems.

Instructor Activities -- identifies the principal activities of the instructor in designing and delivering instructional and support activities which will enable the students to achieve the objectives. These typically reflect individual, small group and large group activities as they occur in a classroom, laboratory, office, and/or resource area.

Student Activities -- identifies the major activities of the students as they engage in those instructional activities designed to help them develop the competencies. These typically come from the enabling objectives included in the curriculum

Equipment Needs -- includes the identification of equipment needed by the instructor to deliver the instructional activities requisite for the student to develop the required competencies. The rationale for the equipment identification is reflected in the two previous sections, with the only decision remaining being the appropriate number of equipment items needed.

Facility Needs -- based on the equipment needed cited in the previous section and the number of student stations to be included in the facility, the identification of space needs becomes a relatively simple matter to determine. If the equipment needs have been identified by instructional area, i.e. classroom, laboratory, office, resource/storage area, then it is an easy task to calculate the space needs for each of those respective areas.

Space Relationships -- this section indicates schematically the relationship of each of these areas to each other as well as the total facility to the related areas within the school plant

If educational specifications have not been developed for a proposed new program or facility, many of these data items may be found in the assessment data collected during the evaluation process. The staff of the State Board for Postsecondary Vocational Education may be able to provide part of the needed data. Contacts should also be made with other institutions within the State as well as others throughout the country which have programs comparable to those under consideration for which budget projections are being developed.

Budget projections for new facility needs can be determined on a cost per square footage basis. Contact the staff of the State Board for current estimates on average square footage cost. Simply multiply the total space needs, as identified in the educational specifications or other data sources, by that cost estimate. Care should be taken to include common space needs such as hallways and restrooms in the calculations of those cost projections.

Budget projections for facility renovation may be determined in much the same way. State-wide cost estimates for facility renovation on a square footage basis may be obtained, or depending upon the specific nature of the renovation needed, several estimates may be obtained from local contractors.

Equipment estimates should be available from the data collected during the needs assessment process, particularly if estimated start-up cost for equipment was included as a factor in the calculation of the weighted index profile as recommended in the model. Other sources include educational specifications and equipment price lists compiled by other schools offering a comparable program. Should all else fail, individual contacts with appropriate vendors can be made to determine these budget projections.

The budget projections needed for personnel may include not only instructional personnel salaries and fringe benefits, but support staff salaries and fringes as well. Although these should be determined and identified separately, attention should be given to the identification of staffing needs requisite for the successful initiation of the program/project/service being proposed. Reference should be made to the "terms and conditions of employment" to determine the qualifications recommended for the type(s) of staff personnel proposed. Reference to current salary schedules, of course, should be made to estimate salary ranges parallel to the qualifications identified.

Expenditures related to staff salaries and fringe benefits are travel and staff development needs. If travel funds are needed for an instructional position, several factors enter into consideration including the organization of the program (laboratory vs cooperative), inclusion of off-site experiential activities (field trips, periodic internships, structured observations, capstone OJT blocks), and local policies pertaining to travel reimbursement for outside speakers, etc. Funds for staff development should be formulated in concert with the development of the school's annual staff development program proposal with attention paid to individual, small group and large group or total staff needs.

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An in depth look should be taken at budget projections needed for support services with particular reference to the additional types of supplementary services needed to assure student success at the school as well as the basic foundation of services provided, e.g. budget needs for underwriting the development of a "vestibule training module" as requisite to admission in a given program, additional testing and guidance services pertinent to the new program area proposed.

Budget needs for supplies and materials should relate specifically to two variables: the nature of the curriculum and the projected student enrollment. Particular reference to the terminal and enabling objectives of the curriculum, the instructional activities outlined for the students' achievement of those objectives, and the equipment items necessary for the implementation of those activities provide an excellent basis for the identification of need for materials and supplies.

Maintenance and operation costs should be considered, particularly in reference to the unique nature of the curriculum. The utilization of unique equipment items which may tend to make the M&O expenses of that proposed program exceed the average cost should be closely examined and projected with explicit documentation.

Last, but not least, attention should be given to miscellaneous needs which might include such expenditures as equipment rental or leasing or other needs not otherwise included in the categories previously described.

In budget development, care should be taken to identify projected costs for each instructional program and support service. With schools managing multi-million dollar budgets, it is absolutely essential that an appropriate system of cost accounting be maintained wherein cost units can be identified. The establishment of cost units and the internal allocation of resources to those units provides an excellent management tool for more accurately identifying actual program need, allocating resources appropriate to that need, and controlling actual expenditures in keeping with those budget allocations. Such a cost accounting system can be easily computerized and monitored on a continuous basis by all pertinent personnel from the instructor or department head to the institution's business manager.

In the development of the projected budget, it is suggested that budget projections start at the "front-line" level with the instructional staff together with their respective craft advisory committees. If the projections are for an expanded program, these persons constitute the primary experts in the identification of budget need. If the projections are for a new program, attention should be given to its compatibility with other programs and individuals identified from those programs who could provide pertinent input and direction.

The budget proposals should then be aggregated at each organizational level with an examination made to assure the inclusion of essential budget needs, a realistic balance in requests for supplementary items, and that the requests are in keeping with state guidelines.

As stated previously, if the requests for a new or an expanded program requires new dollars rather than the re-allocation of current resources, it will typically require a two-year period from the initiation of the local needs assessment to the approval of the requests and the initiation of the program. This time period is required in order to accommodate the compilation of state-wide budget requests from all agencies by the Office of Planning and Budgeting prior to forwarding its recommendation to the Office of the Governor, and from there to the Georgia Legislature. Adequate lead time is, therefore, of critical importance in the development of budget projections for new and expanded programs requiring new monies.

In the preparation of these budget projections, major consideration must be given to the political process and its array of screens which scrutinize and filter the budget requests as they move through the review process. A delicate balance must be found between over-stating budget needs in the anticipation of cuts which often results in a considerable loss of current and future credibility in the management of the institution by the State Board, the Office of Planning and Budgeting, the Governor, and the State Legislature, and the inverse problem of under-stating budget needs which can seriously restrict the potential effectiveness of a given program or service. A careful review of previous funding patterns and an analysis of the current political climate may offer important clues in the resolution of this dilemma.

SAMPLE BUDGET PLANNING WORKSHEET

Proposed Program/Service: _____

Program/Service Objective: _____

_____

ITEMS	ESTIMATED COST	RATIONALE
FACILITY		
EQUIPMENT		
STAFF/PERSONNEL		
TRAVEL		
STAFF DEVELOPMENT		
SUPPLIES/MATERIALS		
M&O		
MISCELLANEOUS (IDENTIFY)		
GRAND TOTAL		

Budget Projections, Ongoing Programs

The need for close coordination between planning and budgeting is equally as important for ongoing programs as is the case for new and expanded programs. Although program, departmental and institutional plans constitute the focal point of operation, they rely on adequate resources to make them work. Front-line involvement in the budgeting process serves to enhance one's feeling of ownership in the total process as well as enhancing its credibility. Too, it provides an opportunity for self-evaluation in assessing how efficiently the recipient department or program has been in utilizing their current resources to fulfill its stated purposes.

One additional benefit in maintaining an integration of the evaluation, planning and budgeting process is that it places the institution in a proactive budgeting position. Throughout the years, most educational institutions have reacted to legislative allocations of funds by outlining program plans after institutional budget allocations have been announced. Although it is not anticipated that this process will change much in reality, it can at least place the institution in the position of an objective--budget stance as opposed to a budget--objective stance. Once in place with a comprehensive accurate data base, an internal cost accounting system, and enhanced credibility relative to the appropriateness of its budget requests, the institution will have made major strides in increasing its success in the budget negotiation and allocation process.

The budget developed for ongoing programs is most typically the annual budget which is often referred to as the "bread and butter" member of the budgeting family. It is the document receiving the most attention from public and institutional parties, and is, of course, the one that directly affects the character and daily operation of the institution. Because this budget has the most affect on programs and services within the school it is subjected to the most careful scrutiny and generates the most intense debate. (Norton, 1981)

In approaching the budgeting process for ongoing programs, several less-than-desirable ways have been used in the past including:

1. The across-the-board sweep -- regardless of program or unit need, every unit gets the same dollar or percentage increase

2. The rotation plan -- each program or unit "takes turns" in recieving its larger share of the pie

3. The squeaky-wheel-gets-the-grease plan -- the one who shouts the loudest gets the most

4. The political expediency model -- power and political influence gets the greatest share

5. The lowest cost plan -- select the alternative which costs the least

6. The fortunate sum concept -- award the windfall to the request which coincides with the same dollar amount

These same approaches to budgeting have, of course, been used at the state and national levels as well as in local institutions. The public outcry for accountability, however, is creating a greater focus on the rational substantiation of need as the primary basis for budgeting. Where budgeting is a logical outgrowth of planning, such rational substantiation is developed.

As was suggested in the previous section, it is of equal importance that the institution establish and maintain a cost accounting system which can track actual program or unit cost and provide a basis for accurate cost-benefit analyses. In the development of such a system, attention should be given to the identification of both fixed cost and variable costs incurred by each program area and/or organizational unit. Fixed costs typically refer to those costs which do not vary by virtue of size, e.g. instructional salary for a given individual does not vary in relation to the size of an instructional program. Too, they constitute expenses which will be incurred regardless of its specific nature, e.g. the instructional salary for an individual will not vary whether the program is offered as a laboratory-based program or as a cooperative program.

Variable costs, on the other hand, vary directly with the size and nature of the program, e.g. with increased enrollment, one can anticipate a direct increase in supply cost. The need for welding rods in a welding program or cut flowers in a floristry program constitutes an expense far greater than would expense items of other programs. Lack of attention to variable costs almost envitably leads to the intense budget disputes and budget disparities. Although programs and/or organizational units are of equal importance to the institution, it does not follow that they should be treated equally in the budgeting process.

Attention should also be given to the identification of direct and indirect costs. With the establishment of fixed and variable costs for each organizational unit, little trouble should be encountered in determining direct costs. A careful analysis must be made, however, in the identification of indirect costs or those costs which may be incurred institution-wide but whose pro rata share of benefit needs to be charged back to the organizational unit in order to determine its actual, total cost.

The same general budget categories as were identified in the previous section are also appropriate for the development of the budgets for ongoing programs, namely: facility, equipment, supplies and materials, staff/personnel, travel, staff development, maintenance and operation, and miscellaneous. The sample budget worksheet shown on page may also be helpful in this process.

In the identification of budget needs for program improvement and/or program modification, careful attention must be paid to the Program Improvement Plan and the corrective action measures described therein. If a major revision in the curriculum is needed, then that effort should be reflected in the budget. If a comprehensive promotion and recruitment effort needs to be developed and implemented, the needed resources for that activity should be reflected in the budget.

Likewise, it is of equal if not greater importance that careful attention be given to identifying those types of pertinent improvements which can be made with no budget adjustments or budget increases. Again, the emphasis must continue to be on more effective and efficient utilization of current resources. That type of effort will go far in enhancing the credibility of the management team of the institution and in strengthening its rationale for legitimate, future budget increases.

In those cases where program modifications are planned which will significantly alter or re-direct the focus on a program, much the same approach needs to be followed in determining budget needs as was described in the previous section. This is especially critical in the identification of facility modifications, equipment needs, and need for either staff additions or changes or more intensive staff development activities.

To this point, all of the attention has been focused on the expenditure side of the ledger in the preparation of the budget. Attention must be given, however, to the revenue side of the budget as well. Although the greatest revenue source for the local institution has been state allocations including the state's distribution of federal funds, budget demands are rapidly increasing and have, in many instances, far-exceeded the availability of state and federal resources. Local funds for the post-secondary institutions have varied widely throughout the years, with some schools receiving no local support.

Shifting patterns suggest that future emphasis will be placed on increased state support and increased emphasis on tuition and/or fees. Aside from these changes, however, is the growing need for the local institutions to look for alternative, supplementary funding sources. Such sources can include private foundations, business and industry, gifts and other governmental agencies such as the Department of Labor, the Department of Commerce, the Depar ment of Agriculture, the Department of Health and Human Services, and the military.

There are currently over 26,000 foundations in the United States, but only about 100 of them distribute some 70% of the available foundation assets. Sources which might be of help in locating and obtaining some of these assets include:

Foundation Directory -- lists more than 2,500 foundations in the United States

Foundation Grants Index -- contains an annual compilation of grants of $5,000 or more awarded by some 260 of the nation's largest foundations

Foundation News -- published bimonthly to help fund seekers identify potential resources among private, community and corporate foundations

Grantsmanship Center News -- deals with both private and public funding; distributes six yearly issues which include "how-to" articles and the identification of new grants and deadlines

Sources of information relating to federal funding include the Catalog of Federal Domestic Assistance, the Guide to Federal Education Programs, Commerce Business Daily and the Federal Register.

As the expenditure side of the ledger is totaled and estimates are made of revenue expectations from the State, the local institutions and its planning teams might well look to these outside sources for additional funding to assist in achieving the objectives identified in their planning documents.

Budget and Application Presentation

In the presentation of the final budget document, primary emphasis should be placed on clarity and the availability of adequate and appropriate documentation to justify and substantiate the line item requests within the budget. The format should be such that it is easy for the reader to follow and understand. It should be logical in its orderly display of budget items, and it should be accurate in every detail. Nothing will destroy the credibility of the budget document quicker than for the reader to find careless mathematical errors therein.

Finally, the budget must be translated into the institution's local application. It is vital to the institution that the application forms be completed accurately and in a timely manner. The staff of the State Board for Postsecondary Vocational Education should be contacted for technical assistance in completing the required forms. In reviewing the application prior to submitting it to the State, the following list of checkpoints might be reviewed:

...Check to see that all instructions have been followed accurately.

,,,Note the due dates and deliver on time.

...Check to see that all required signatures have been obtained.

...Check for accuracy.

...Make a copy for the files.

Summary

Budgeting represents the final link in the process prior to the implementation of the institution's plan and the repeat of the cycle with the initiation of the evaluation and assessment component. It represents the bottom-line and upon it hinges the potential success for making a difference. As such, its importance cannot be over-stated. If the final budget, however, is based on institutional plans which have been developed from pertinent assessment and evaluating findings, it will be extremely difficult for anyone to refute its credibility.

SECTION VI
REPEATING THE CYCLE
& IMPROVING THE PROCESS

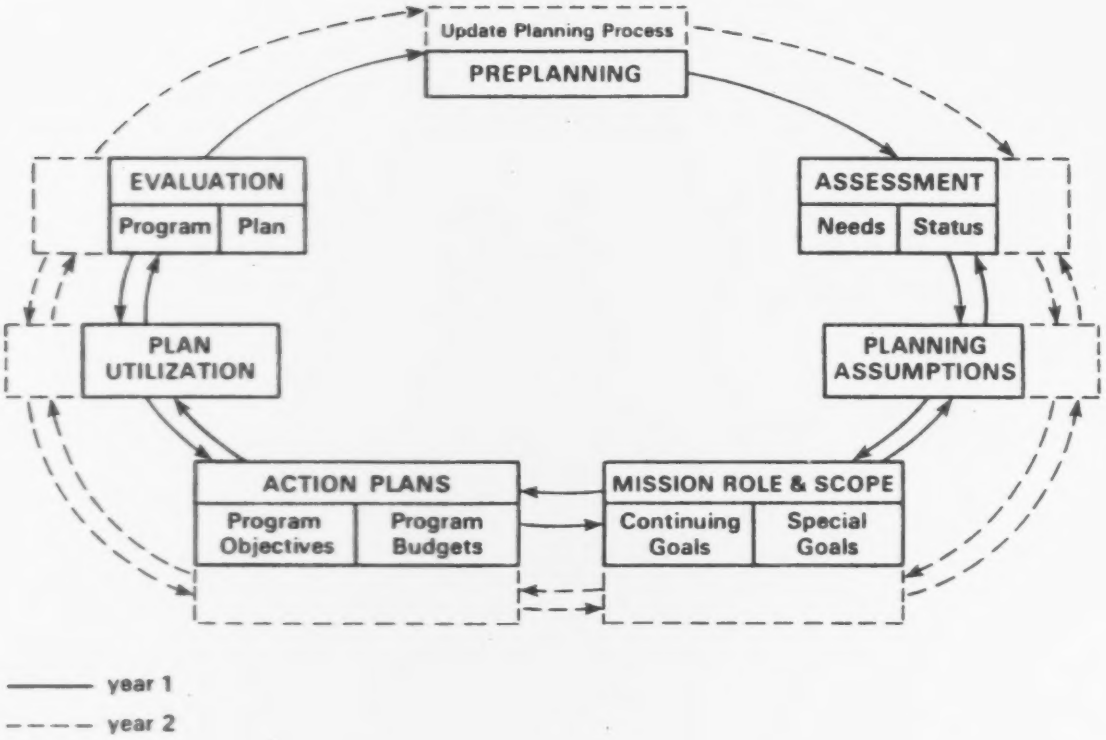
The evaluation, planning and budgeting process should represent a prevasive, continuous activity of the local institution. The process has no beginning point; neither does it have an end. Rather it is a continuous cycle of activity performed by the total staff and faculty of the institution undergirded with the wide support and input of the total community. The continuousness of the cycle is represented in the illustration on the following page.

As stated previously, the implementation of the system should be viewed as a dynamic process in that it is ever-changing, ever-improving. It is not an end unto itself, but a major management tool for achieving better results, improved efficiency and enhanced effectiveness. As can be seen from an in-depth review of the suggested procedures to be followed in its implementation, the evaluation, planning and budgeting system provides a disciplined, structural matrix from which important management decisions can be made. The development, implementation and improvement of the system should, therefore, be approached as being <u>evolutionary</u> in nature. Maximum value will not be realized the first year, nor the second year. As was pointed out earlier, management specialists typically require five or more budget cycles to become comfortable with the process. The continued enhancement of the process, however, is dependent upon the commitment of the management team to its improvement and conscientious follow-through with the school's program improvement and program development plans.

<u>Management Commitment for Follow-through</u>

The importance placed on the evaluation, planning and budgeting process and the seriousness of purpose with which the management team pursues its implementation is reflected quite clearly by the actions of those team players and most especially, by the model behavior demonstrated by the top leadership of the school. As with each of the program and service

THE PLANNING CYCLE



Source: Comprehensive Institutional Planning in Two-Year Colleges, A Planning Process and Case Study, The National Center for Research in Vocational Education, 1980.

units represented in the school, each administrative office should have developed its plan of activity based on a comprehensive assessment of its effectiveness and efficiency. The quality of that plan and the energy expended by the administrator in its implementation are easily evidenced by the faculty and staff. As the old saying goes, "what's fair for the goose is fair for the gander". If the behavior model set by the top management team is less than serious, then the faculty and staff can be expected to approach the process with the same lack of concern and commitment.

The example set by management in its own office is not sufficient, however. The commitment of the management team must also be reflected in its followup of staff assignment according to the timelines established in the respective unit plans. If considerable effort is expended by a staff in the development of a given program of activity, and the management team takes no interest in determining how well it was performed, or, if indeed, it was implemented at all, then management can expect little interest to be taken by the staff in subsequent years. Checkpoints, timelines and evaluation measures are reflected in all unit plans. Each must be faithfully addressed by the management team throughout the implementation process.

Management Commitment for Improvement of the System

If a system is dynamic, then it is continuously open to change and improvement. Procedures, planning calendars, and personnel assignments should not become so fixed that they cannot be modified as the need arises. As is reflected in the illustration on the previous page, a concerted effort should be made in all subsequent years of the cycle to improve the process.

Attention should first be focused on the activities and procedures reflected in the preplanning process. Whom did we involve? Were they the appropriate persons? Were we organized in an effective manner? Did we make an accurate assessment of the political, economic and social environment of the institution? How did we assess the institution's environment? Could those techniques be improved? Were our planning

assumptions accurate? Did we overlook some critical assumptions which should have provided a basis for our planning process? Did we do an effective job in identifying the resource requirements needed to implement the process? Were those resources provided? What resource requirement modifications do we need to identify for the next subsequent year? How appropriate are our school's mission statements and goals? Have they been accepted and are they supported by the community? Do they provide appropriate destination points for the school? What problems did we encounter in meeting the major timelines established in the school's planning calendar? How should it be modified to be more realistic and effective? Did the staff have the requisite competencies to do the job? What changes do we need to identify in the staff development program of activities to enhance their competency?

The assessment of the evaluation process as it was implemented in the school should be studied in depth to identify needed improvements. Who are involved in the evaluation process? Were they the appropriate individuals? To what extent were they subjectively biased? How accurate is the data base we used to determine program enrollment, completion and placement? What can we do to improve the accuracy of that data base? How thorough were we in diagnosing the causes of deficiencies in some programs? What techniques did we use to distinguish between symptoms and causes? What problems did we encounter in conducting the employment surveys? How can that process be improved? How accurate is our school's cost accounting system? What modifications does it need to provide a more accurate data base for program planning and decision making?

The assessment of the planning process as it was conducted in the school should seek to identify those improvements which should be put in place to make that process of more value to the school. Attention should be focused on such questions as, are our program improvement plans truly pertinent to the diagnoses arrived at in the evaluation process? Are those plans truly prescriptive in nature? Were the objectives we idnetified appropriate and important to the accomplishment of the school's goals and mission? Were the strategies appropriate to the objective?

Were they sequenced appropriately and in an efficient manner? Were the timelines realistic? Were the appropriate staff assignments made? Were the same types of problems encountered in several program units? What changes need to be made to preclude the occurence of those problems in the future?

And finally, the budgeting process should be reviewed to determine the appropriateness of the budget items in relation to the identified plans. Are the budget items truly relevant to the actions called for in the program improvement and program initiation/expansion plans? Are the budget requests realistic? How accurate are the data sources upon which the budget items are derived? Does the school have adequate, accurate data to justifiably support the budget requests? What methods were used to translate need in to cost projections? How can those methods be improved? Can an accurate audit trail be traced to actual program costs and budget projections? What should be done to improve the cost accounting procedures followed within the school?

As these types of analyses are being made, attention should also be focused on those procedures, techniques, organizational patterns, etc. which worked. Unintentional change of successful techniques should be avoided. Rather, every effort should be made to build on those success stories, to emulate them in comparable situations, and to enhance their positive impact to the total process. Through such deliberate study, the evaluation, planning and budgeting system can indeed provide a "gyroscopic stabilizer" for initiating new forays and sustaining unexpected shocks.

APPENDIX A

EVALUATION OF ON-GOING PROGRAMS: KEY INDICATORS, DEFINITIONS, STANDARDS FOR PRELIMINARY ASSESSMENT

EVALUATION: ON-GOING PROGRAMS
KEY INDICATORS AND DEFINITIONS

PRIMARY ASSESSMENT:

ENROLLMENT: Total enrollment by taxonomy of students enrolled on a full-time basis in occupational education programs; (Refer to State Board for current definition of "full-time")

3-YEAR AVERAGE ENROLLMENT BY INSTRUCTOR: Average annual enrollment by instructor by taxonomy over a three year period compared to established standard

3-YEAR TREND IN AVERAGE ENROLLMENT BY INSTRUCTOR: Comparison of first year average annual enrollment by instructor to third year average annual enrollment by instructor

COMPLETION: Includes the total number of graduates and students who have completed the program with certifiable job skills and who are available for employment.

3-YEAR AVERAGE COMPLETION BY INSTRUCTOR: Average annual completion by instructor by taxonomy over a three year period compared to established standard

3-YEAR TREND IN AVERAGE COMPLETION BY INSTRUCTOR: Comparison of first year average annual completion by instructor to third year average annual completion by instructor

PLACEMENT: Includes the total number of positive placements identified as the number employed in field for which trained, number employed in a related field, number continuing their education and number entering the military.

3-YEAR AVERAGE PLACEMENT BY INSTRUCTOR: Average annual placement by instructor by taxonomy over a three year period compared to established standard

3-YEAR TREND IN AVERAGE PLACEMENT BY INSTRUCTOR: Comparison of first year average annual placement by instructor to third year average annual placement by instructor

SOURCE OF DATA: MIS unduplicated enrollment report issued Fall Quarter each year (NOTE: Until such time as the MIS system applies the definition of full-time student consistently to both day and evening programs, enrollment data may have to be obtained from school attendance reports.)

EVALUATION: ON-GOING PROGRAMS

SUMMARY OF PROPOSED CATEGORIAL STANDARDS

KEY INDICATOR	CATEGORY A (90% WT)	CATEGORY B (80% WT)	CATEGORY C (70% WT)
PRIMARY ASSESSMENT:			
3 YR AVERAGE ENROLLMENT BY INSTRUCTOR TO STANDARD	14+	10-14	Less than 10
3 YR ENROLLMENT TREND BY INSTRUCTOR	Increase of more than 10% OR stable enrollment of 14+ (Category A) for 3-year period	Increase/ decrease of no more than 10%	Decrease of more than 10%
3 YR AVERAGE COMPLETION BY INSTRUCTOR TO STANDARD	10+	8-10	Less than 8
3 YR COMPLETION TREND BY INSTRUCTOR	Increase of more than 10% OR stable completion of 10+ (Category A) for 3-year period	Increase/ decrease of no more than 10%	Decrease of more than 10%
3 YR AVERAGE PLACEMENT BY INSTRUCTOR TO STANDARD	8+	6-8	Less than 6
3 YR PLACEMENT TREND BY INSTRUCTOR	Increase of more than 10% OR stable placement of 6+ (Category A) for 3-year period	Increase/ decrease of no more than 10%	Decrease of more than 10%
SUMMARY CATEGORIZATION	CATEGORY A Average of +87% weight for 6 indicators	CATEGORY B Average of 74-87% weight for 6 indicators	CATEGORY C Average of less than 74% weight for 6 indicators

CATEGORIZATIONS OF CURRENT PROGRAMS TO STANDARDS

CATEGORY A	Represents exceptional quality; exceeds state standards
CATEGORY B	Acceptable in quality; meets state standards
CATEGORY C	Does not meet state standards; need major improvements or modifications; reflects probationary status if maintained a second year

APPENDIX B

EVALUATION OF ON-GOING PROGRAMS: KEY INDICATORS, DEFINITIONS, STANDARDS, AND INSTRUMENTS FOR SECONDARY ASSESSMENT

EVALUATION OF ON-GOING PROGRAMS: KEY INDICATORS AND DEFINITIONS

EMPLOYER EVALUATION OF STUDENTS: Annual employer evaluation conducted by state MIS system in cooperation with the local school to determine the employers' assessment of such items as technical knowledge, work attitude, work quality, relative preparation and overall rating of student performance.

STUDENT EVALUATION OF PROGRAM: Annual student evaluation of program conducted by state MIS system in cooperation with the local school school to determine the students' assessment of such items as job preparation, instructional content, tools and equipment, teacher presentations in class, teacher presentations in laboratory, organization of instruction, grading and testing procedures, interest of the instructor, and class size.

ASSESSMENT OF FACILITIES: Annual assessment of appropriateness and condition of program facilities as determined by a team composed of the instructional coordinator, instructor, advisory committee member and others as may be designated locally, using an established instrument.

ASSESSMENT OF EQUIPMENT AND INSTRUCTIONAL MATERIALS: Annual assessment of appropriateness and condition of program equipment and instructional materials as determined by a team composed of the instructional coordinator, the instructor, an advisory committee member and others as may be designated locally, using an established instrument.

ASSESSMENT OF BUSINESS SUPPORT AND PARTICIPATION: Annual assessment of extent to which the business/industrial community have supported the program and representatives have participated in designed program support activities. This assessment is conducted annually by the instructional coordinator together with the instructor using an established instrument.

SOURCES: The MIS employer and student followup reports completed annually and issued during the Fall Quarter will be used to as the data source for the EMPLOYER ASSESSMENT and for the STUDENT ASSESSMENT. Refer to the EPB-MODEL proposed forms for ASSESSMENT OF FACILITIES, ASSESSMENT OF EQUIPMENT AND INSTRUCTIONAL MATERIALS, AND ASSESSMENT OF BUSINESS SUPPORT AND PARTICIPATION.

ASSESSMENT OF FACILITIES

Please circle the response which most closely approximates your opinion and include any additional comments which you may deem appropriate. Use the scale below as a guide to identify your response.

5 -- Excellent condition
4 -- Good condition
3 -- Fair condition
2 -- Poor Condition
1 -- Condition is unacceptable
N/A - Item does not apply to local situation

1. The facility is comparable to or simulates current business facilities for that occupational area.	NA	1	2	3	4	5
2. The facility is located next to other comparable or related facilities where appropriate, e.g. auto body/auto mech.	NA	1	2	3	4	5
3. Space allocations for classrooms are appropriate for the number of students enrolled.	NA	1	2	3	4	5
4. Space allocations for laboratories are appropriate for the number of students enrolled.	NA	1	2	3	4	5
5. Space allocations for storage areas are appropriate for the type of program and number of students enrolled.	NA	1	2	3	4	5
6. The external structures--roof, walls, entrances--are in good condition and are structurally sound.	NA	1	2	3	4	5
7. The adjacent internal structures--stairs, corridors, lobbies--are safe, structurally sound, and attractive.	NA	1	2	3	4	5
8. Environmental conditions--heating, cooling, lighting, accoustics, brightness--are condusive to learning.	NA	1	2	3	4	5
9. The arrangement of the instructional areas flexible and adequate for a variety of learning activities.	NA	1	2	3	4	5
10. Storage facilities are adequate and are easily accessible.	NA	1	2	3	4	5
11. Handicapped and/or physically disabled students have access to space that accommodates their needs.	NA	1	2	3	4	5
12. Fire resistant storage areas are available to store combustible material.	NA	1	2	3	4	5
13. Fire extinguishers are accessible where appropriate and are in good condition.	NA	1	2	3	4	5
14. Electrical outlets and control switches are in safe condition and are readily accessible.	NA	1	2	3	4	5
15. The heating and ventilation system maintains comfortable and healthful conditions including properly installed filtering for smoke, odors, fumes, gases.	NA	1	2	3	4	5

COMMENTS _____

_____

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ASSESSMENT OF EQUIPMENT
AND INSTRUCTIONAL MATERIALS

Please check the response which most closely approximates your opinion and include any additional comments which you may deem appropriate. Use the scale below as a guide to identify your response.

5 -- Excellent in all respects; excellent condition
4 -- One or two items may need some repair; but overall in good condition
3 -- Several items are in need of repair and/or replacement; overall condition is fair
2 -- The majority of the items are in need of repair and/or replacement; overall condition is poor
1 -- Practically all of the items are in need of repair and/or replacement; condition is unacceptable
N/A - Statement does not apply to local situation.

1.	The equipment in the laboratory reflects current technology and is presently being used in business/industry.	NA	1	2	3	4	5
2.	The type, variety and quantity of tools and equipment are adequate and appropriate for meeting the instructional objectives of the program.	NA	1	2	3	4	5
3.	The equipment and tools are in good repair.	NA	1	2	3	4	5
4.	The equipment is sufficiently durable for the identified instructional purposes.	NA	1	2	3	4	5
5.	The equipment is basically hazardless to use when operated according to instructions.	NA	1	2	3	4	5
6.	The equipment is appropriate and safe for use by handicapped students.	NA	1	2	3	4	5
7.	Cut-off switches for machines and equipment are easily identifiable and reachable from the operator's position.	NA	1	2	3	4	5
8.	Safety guards, where appropriate, are provided and are secured to the machines.	NA	1	2	3	4	5
9.	All machines and equipment, except portable machines and equipment, are appropriately secured as needed to prevent walking or moving.	NA	1	2	3	4	5
10.	Equipment and tools are properly stored.	NA	1	2	3	4	5
11.	The instructional materials are current and reflect contemporary concepts and practices.	NA	1	2	3	4	5
12.	The instructional materials are appropriate for the accomplishment of the identified objectives.	NA	1	2	3	4	5
13.	The materials are written at a reading level appropriate to the average student enrolled in the program.	NA	1	2	3	4	5
14.	Alternative instructional materials are provided for special needs students.	NA	1	2	3	4	5
15.	The instructional materials provide appropriate problem solving activities which will enhance the transfer of learning to alternative work environments and situations.	NA	1	2	3	4	5

COMMENTS: _____

_____

ASSESSMENT OF BUSINESS SUPPORT AND PARTICIPATION

Please identify those criteria identified below for which you find evidence of business/industry participation and support in program planning, operation, and/or evaluation.

		YES	NO
1.	Provided input to instructional staff re program objectives, content outline, instructional activities.	____	____
2.	Reviewed course outlines and materials for appropriateness.	____	____
3.	Provided opportunities for student internships, practicuums, OJT, and/or clinical experiences.	____	____
4.	Provided opportunities for instructor to update technical skill by participating in in-house activities.	____	____
5.	Served as guest speaker/guest lecturer.	____	____
6.	Provided training materials appropriate to instructional objectives of program.	____	____
7.	Provided equipment on loan and/or donated equipment appropriate for use in the instructional program.	____	____
8.	Assessed adequacy of program's facilities and equipment.	____	____
9.	Assessed adequacy of program's instructional materials and supplies.	____	____
10.	Referred other business/industry representatives to program staff.	____	____
11.	Referred his/her employees to program for refresher training and/or requested in-house training of employees by instructional staff.	____	____
12.	Assisted in developing maintenance, safety and security policies/procedures for the operation of the program.	____	____
13.	Arranged visits to business/industry plants for faculty and/or students.	____	____
14.	Promoted/publicized the program to company employees, their families, other business and/or the general community through each media as house organs, bulletin boards, news stories, civic club presentations.	____	____
15.	Provided career and job placement advice to students.	____	____
16.	Sponsored scholarships or other financial assistance to students.	____	____
17.	Provided recognition for outstanding students.	____	____
18.	Recruited and hired program completers.	____	____

OTHER _____

EMPLOYER EVALUATION OF STUDENTS

PROGRAM TITLE & TAXONOMY #	TECHNICAL KNOWLEDGE	WORK ATTITUDE	WORK QUALITY	OVERALL RATING	RELATIVE PREPARA.	MEAN RATING ALL ITEMS	CATEGOI

Directions: Use MIS Follow-up Report, Fall 1984 for data. Calculate average of five items to determine "mean rating, all items". Identify category of program effectiveness using the following standards for the last column: CATEGORY A = 4.5+; CATEGORY B = 4.0-4.4 CATEGORY C = Less than 4.0.

STUDENT EVALUATION

OGRAM TITLE & TAX. #	JOB PREP.	INSTRUC. CONTENT	TOOLS & EQUIP.	PRES. IN-CLA.	PRES. IN-LAB	ORG. INST.	GRAD/ TEST	INST. INT.	CLASS SIZE	MEAN RATING

DIRECTIONS: Use MIS Follow-up Report, Fall 1984 for data. Calculate average of nine items to determine "mean rating" in last column. Enter percentage and category of program effectiveness using the following standards for the last column: CATEGORY A = 90%+, CATEGORY B = 80-89%, CATEGORY C = less than 80%.

SUMMARY OF PROPOSED CATEGORIAL STANDARDS -- SECONDARY ASSESSMENT

KEY INDICATOR: SECONDARY ASSESSMENT	CATEGORY A (Healthy sign; look elsewhere for cause of problem)	CATEGORY B (May be some cause for concern; keep an eye on this)	CATEGORY C (Definite cause for concern; investigate)
3 YEAR AVERAGE, EMPLOYER OVERALL RATING	4.5 and above	4.0-4.4	Less than 4.0
3 YEAR AVERAGE, MEAN STUDENT RATING	90% and above	80-89%	Less than 80%
ASSESSMENT OF FACILITIES	Total rating of 62 or over	Total rating of 42-61	Total rating of less than 42
ASSESSMENT OF EQUIPMENT & MATERIALS	Total rating of 62 or over	Total rating of 42-61	Total rating of less than 42
ASSESSMENT OF BUSINESS SUPPORT/PARTICIPATION	14 or more YES	11-13 YES	Less than 11 YES

APPENDIX C

EVALUATION, NEW AND EXPANDED PROGRAMS:
KEY INDICATORS AND INSTRUMENTS

EVALUATION: NEW AND EXPANDED PROGRAMS
KEY INDICATORS FOR PROGRAM JUSTIFICATION

STATE-WIDE EMPLOYMENT TRENDS: Increase, decrease or stable employment trends evidenced on a state-wide basis for the occupation(s) under consideration as determined by the Department of Labor, the staff of the State Board for Postsecondary Vocational Education, or other sources as identified by the staff of the PVE Board.

UNMET NEED WITHIN 50 MILE RADIUS: Difference between employment demand (including additions and replacements) and estimated employment supply for the occupation(s) under consideration within a 50 mile radius of the school as determined by the staff of the school using instruments and procedures approved by the staff of the PVE Board.

ESTIMATED START-UP EQUIPMENT COST: The total cost estimated by the staff of the PVE Board to either initiate a new program in a designated occupational area and/or to expand a given program using state-wide average cost figures for individual instructional programs; such cost data to be generated through a state-established cost accounting system.

ESTIMATED ANNUAL OPERATING COST: The total cost estimated by the staff of the PVE Board to operate a designated instructional program for a year using state-wide average cost figures for individual instructional programs; such cost data to be generated through a state-established cost accounting system.

ESTIMATED COST PER PLACEMENT: The total cost estimated by the staff of the PVE Board per positive placement in a designated instructional program using state-wide average cost figures for individual instructional programs; such cost data to be generated through a state-established cost accounting system.

EVIDENCED LOCAL BUSINESS/INDUSTRY SUPPORT FOR PROPOSED PROGRAM: The interest and support of the business and industrial community within a 50 mile radius of the school as evidenced on survey instruments approved by the staff of the PVE Board and used by the staff of the local school to identify UNMET NEED.

PROGRAM IMPROVEMENT PLAN FOR "C" PROGRAMS

PROGRAM: _____

MAJOR DEFICIENCY AS NOTED FROM ASSESSMENT CRITERIA: _____

IDENTIFIED CAUSE(S) FOR DEFICIENCY _____

_____

FOLLOW-UP ACTION TO BE TAKEN:

Activity	Timelines	Person Responsible
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

BUDGET REQUIREMENTS, IF ANY, OVER-AND-ABOVE REGULAR FUNDING:

Category	Amount	Justification
Salary	_____	_____
Travel	_____	_____
Staff Development	_____	_____
Equipment	_____	_____
Supplies/Materials	_____	_____
Other (Specify)	_____	_____
TOTAL	_____	

PROGRAM INITIATION OR EXPANSION

PERSON(S) RESPONSIBLE	FACILITIES, SUPPLIES, EQUIPMENT PERSONNEL NEEDED (SPECIFY)	BUDGET REQUIREMENTS BASED ON PREV. COL.	EVALUATION MEASURES	MANAGEMENT SIGN-OFF

ROGRAM: _____

PLANNING GUIDE :

SPECIFIC OBJECTIVES	RATIONALE	STRATEGIES/ACTIVITIES PLANNED TO ACHIEVE OBJECTIVE	STRATEGY TIMELINES	
			PLANNED DATE OF COMPLE.	ACTUAL COMPLE.

APPENDIX E

MAJOR SOURCES OF DATA

MAJOR SOURCES OF DATA*

Data Element	Source	Frequency	Geographic Scope	Published or Available from
1. *Occupational estimates and projections*—occupations within industry and cross-industry. Contains intermediate and long-run projections and job openings data.	Cooperative Federal-State Occupational Employment Statistics—Survey Program	3-year cycle	Statewide and for some states selected substate areas	Cooperating State Employment Security Agencies
	Cooperative Federal-State Occupational Employment Statistics—National, State, Area Projections Program	Annually	Statewide and selected substate areas	Cooperating State Employment Security Agencies
2. *Estimates and projections of supply*—Institutional and noninstitutional.	Annual Report on Vocational and Technical Education	Annually (FY)	Statewide and substate areas	State Departments of Education and Vocational Education
	Vocational and Technical Data	Annually (FY)	Statewide and substate areas	State Departments of Education and Vocational Education
	CETA Management Information Systems (MIS)	Annually (FY)	Statewide and substate areas	CETA Prime Sponsors
	Employment Security Automated Reporting System (ESARS)	Quarterly, Annually, (FY)	Statewide and substate areas	State Employment Security Agencies
	Projections of Educational Statistics	Annually	National	Office of Education
3. *Applicants and job orders on file with the SESA s*	Employment Security Automated Reporting System (ESARS)	Quarterly and FY	Statewide and substate areas down to the ES local office level	All State Employment Security Agencies
4. *Wage rates for selected occupations*	Employment Security Automated Reporting System (ESARS)	Quarterly and FY	Statewide and substate areas down to the ES local office level	All State Employment Security Agencies
	Area Wage Surveys. Available in various numbered bulletins	Annually	SMSA s, Regions, National	Bureau of Labor Statistics
	Service Contract Act Surveys. Available in various numbered bulletins	Annually	Selected Areas	Bureau of Labor Statistics
	Municipal Government Wage Surveys. Available in various numbered bulletins	Annually	Selected Areas	Bureau of Labor Statistics
	Industry Wage Surveys. Available in various numbered bulletins	Annually	Selected Areas	Bureau of Labor Statistics

*Charles O. Hopkins, Data Sources for Vocational Education Evaluation. The National Center for Research in Vocational Education. Information Series No. 158, 1979.

Data Element	Source	Frequency	Geographic Scope	Published or Available from
4. (Continued)	Union Wages and Hours Surveys. Available in various numbered bulletins	Annually	Selected Areas	Bureau of Labor Statistics
	Occupational Outlook Handbook (OOH)	Biannually	National	Bureau of Labor Statistics
	Professional, Trade, and Industry Associations, Unions	Varies with source	Varies with source	Varies with source
	State and Federal Income Tax Forms	Annually	Selected Areas	Internal Revenue and State Tax Commission
5. *Occupational definitions*	*Dictionary of Occupational Titles (DOT), 3rd Edition 1965*	Periodic	National	Employment and Training Administration
	OES Survey Dictionary	Periodic	National	Bureau of Labor Statistics and Cooperating SESA s
	Occupational Outlook Handbook (OOH)	Biannually	National	Bureau of Labor Statistics
	Job Descriptions of Large Employers, U.S. Civil Service Commission, State Government Personnel Offices, Local Government Employers	Varies with source	Varies with source	Varies with source
	Professional, Trade, or Industry Associations	Varies with source	Varies with source	Varies with source
	Employment Security Automated Reporting System (ESARS)	Quarterly and FY	Statewide and sub-state area down to the local office area	All State Employment Security Agencies
6. *Occupational Characteristics*– interests, aptitudes, physical demands, working conditions.	*A Supplement to the Dictionary of Occupational Titles, 3rd Edition*	Periodic	National	Employment and Training Administration
	Occupational Outlook Handbook (OOH)	Biannually	National	Bureau of Labor Statistics
	Occupational Outlook Quarterly	Quarterly	National	Bureau of Labor Statistics
	Large Employers, Unions, Professional, Trade, or Industry Associations	Varies by source	Varies by source	Varies by source
	Surveys of Scientific and Technical Personnel	Varies by source	National	National Science Foundation

Data Element	Source	Frequency	Geographic Scope	Published or Available from
7. *Occupational preparation.*	*Occupational Outlook Handbook (OOH)*	Biannually	National	Bureau of Labor Statistics
	Occupational Outlook Quarterly	Quarterly	National	Bureau of Labor Statistics
	Directory of Professional and Occupational Licensing in the U.S.	Undetermined	National and Statewide	Juvenal L. Angel, Modern Vocational Trade Bureau
	Occupational Licensing and the Supply of Nonprofessional Manpower	Undetermined	National	Employment and Training Administration
	ERIC Instructional Package for Vocational Educators	Annually	National and Statewide	Educational Resource Information Center
	A Supplement to the Dictionary of Occupational Titles, 3rd Edition	Periodic	National	Employment and Training Administration
	Projections of Education Statistics	Annually	National	Office of Education
	Annual Report on Vocational and Technical Education	Annually	Statewide and substate areas	State Departments of Education
8. *OE Curriculum codes.*	*Vocational Education and Characteristics of Students and Teachers*	Unknown	National	Office of Education
	Vocational Education and Occupations	Periodic	National	Office of Education, Bureau of Labor Statistics
	Tomorrow's Manpower Needs, Bulletin 1606, Supplement 3, 1973: Matching Occupational Classifications to Vocational Education Program Codes	Periodic	National	Bureau of Labor Statistics
	OES–OE Conversion Listing	Periodic	National	Bureau of Labor Statistics, Cooperating SESA s
9. *Vocational Student Information: Enrollments Followup, Characteristics*—age, race, sex, grade, etc.	USOE Enrollment Report	Annually	National-State	U.S. Office of Education
	Vocational Education Data Systems (VEDS)	Annually	National-State	National Center for Education Statistics
	State Occupational Information Systems (SOICC)	Annually	State	State SOICC

Data Element	Source	Frequency	Geographic Scope	Published or Available from
9. (Continued)	State Management Information Systems	Periodic	State and Local	State Departments of Education and Vocational Education
	Local School Records and Reports	Periodic	Local	Local Schools
	Private Training School Records and Reports	Periodic	Local	Private Schools
	Private School Accrediting Agency	Annually	Local and State	State Private School Accrediting Board or Agency
	Licensing Agency	Periodic	State and Local	State Licensing Board or Agency
	Project Baseline	Periodic	National and State	Northern Arizona University
10. *Facilities and Equipment Utilization, Space, Condition, Adequacy & Investment*	National Study of Vocational Education Facilities and Resource Utilization	Unknown	National	Westat Inc., Rockville, MD
	Vocational Education Data System (VEDS)	Pending	National and State	National Center for Education Statistics
	State Information System	Periodic	State and Local	State Department of Education and Vocational Education
	Local School Records and Reports	Periodic	Local	Local Schools
11. *Curriculum*—Task and competencies, emphasis areas	V-TECS Catalogs	Periodic	Unknown	V-TECS—Atlanta, Georgia
	Occupational Employment Statistics Survey	3-year cycle	Statewide and substate areas	Participating State Employment Security Commissions
	Curriculum Laboratories Network	Periodic	National	U.S. Office of Education
12. *Economic Impact Data*—Investments, taxes	Area Economic Projections, 1990	Unknown	National, State, and Cities	U.S. Department of Commerce, Bureau of Economic Analysis
	State Industrial Development Reports	Periodic	State and substate	State Industrial Development Departments

Data Element	Source	Frequency	Geographic Scope	Published or Available from
12. (Continued)	Tax Commissions Reports	Periodic	State, sub-state, and local	State Tax Commission
	Economic Development Office Reports and Records	Periodic	State, sub-state, and local	State and Regional Economic Development Office
13. *Computer Systems*	Management Information System for Occupational Education (MISOE)	Unknown	Undetermined	Massachusetts State Department of Education Boston, Division of Vocational Education
	Management Information System for Vocational Education (MISVE)	Unknown	Undetermined	The National Center for Vocational Education, Ohio State University
	Management Information Systems for Vocational Education – A National Study	Unknown	National	The National Center for Research in Education, The Ohio State University
14. *Financial Information*	Vocational Education Data System (VEDS)	Pending	National and State	The National Center for Education Statistics
	State Information Systems	Periodic	State and Local	State Departments of Education and Vocational Education
	Local School Reports and Records	Periodic	Local	Local Schools and Institutions
15. *Personnel and Staff Reports*	Vocational Education Data System (VEDS)	Pending	National and State	National Center for Education Statistics
	State Credentialing or Certification Reports	Annually or Periodically	Statewide	State Certification Agency or Department
	State Information Systems	Periodic	Statewide and local	State Department of Education or Vocational Education
16. *Demographic Data,* Number of persons, age, sex, race, income levels, occupations, and general or social characteristics	Census Publications	Decennial and Some Annual Update	National, State, sub-state, County, District, and Place	Bureau of the Census, U.S. Department of Commerce

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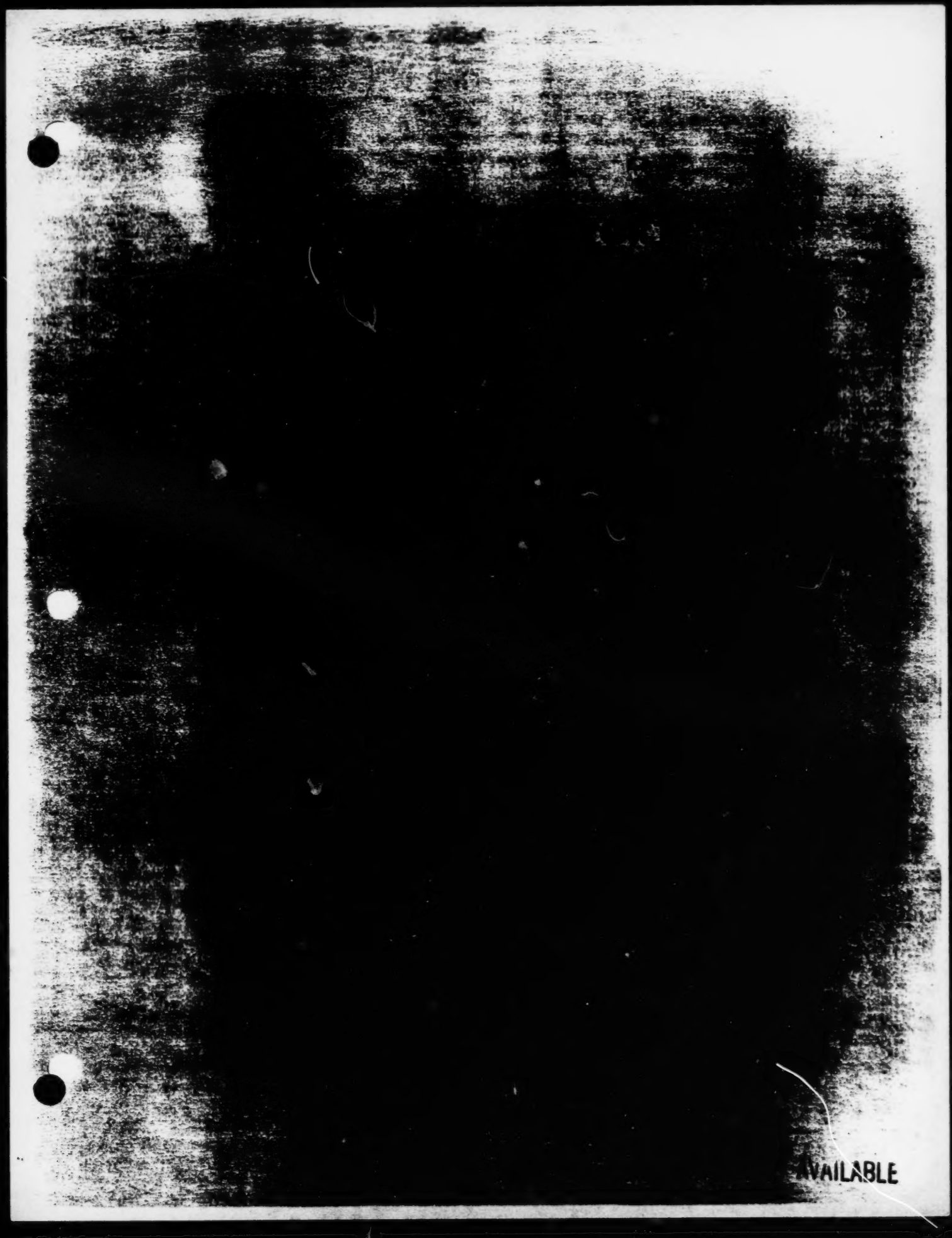
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EVALUATION REPORT:
EVALUATION, PLANNING & BUDGETING MODEL

BY

GAIL TRAPNELL, PH.D.
PROJECT DIRECTOR
GEORGIA STATE UNIVERSITY

TABLE OF CONTENTS

INTRODUCTION		1
REVIEW OF PROCEDURES FOLLOWED		4
THE RECOMMENDED EVALUATION, PLANNING & BUDGETING MODEL		23
RECOMMENDATIONS FOR STAFF OF STATE BOARD FOR POSTSECONDARY VOCATIONAL EDUCATION		43
APPENDIX A:	Summary, State Board Presentation December 6, 1984	45
APPENDIX B:	Criteria & Data Sources for Assessing Program Effectiveness	52
APPENDIX C:	Criteria & Data Sources for Justifying New/Expanded Programs	55
APPENDIX D:	Orientation Meeting, Team Members	59
APPENDIX E:	Preliminary Definitions & Standards	63
APPENDIX F:	Definitions & Procedures Used in Field-Test	75
APPENDIX G:	Definitions & Procedures for Local Surveys	85
APPENDIX H:	Cost Models	95
APPENDIX I:	Summary Responses, Team Member Critique	102
BIBLIOGRAPHY		110

EVALUATION REPORT: EVALUATION, PLANNING & BUDGETING MODEL
POSTSECONDARY VOCATIONAL EDUCATION

INTRODUCTION

The primary mission of postsecondary and adult vocational education in Georgia is the provision of programs and services which develop those job skills demanded by business and industry and needed by its citizens to obtain, maintain and advance in gainful, satisfying employment. In fulfilling this mission, the postsecondary and adult program becomes a major contributor to the economic health and well-being of the State and its citizens.

The design and continued delivery of currently relevant job training programs and services is predicated on the establishment and utilization of a comprehensive evaluation, planning and budgeting system at the local and state levels. According to the staff of the State Board for Postsecondary Vocational Education, evaluation, planning and budgeting have traditionally been viewed as separate but somewhat related functions in the operation of postsecondary vocational-technical schools. While most agree that these functions should be closely integrated, a system for accomplishing this does not exist at the present time in Georgia. The staff attributes this lack of a systematic process to the following:

1. Short-Range Viewpoint -- Planning has been viewed primarily as a short-range function with emphasis on the upcoming year. Typically, local institutions look ahead 1-2 years while some

state-level planning considers needs up to 5 years in the future. However, little serious effort is devoted to needs that extend beyond the next fiscal year.

2. Planning for Compliance Purposes -- Improvements or expansions of existing vocational programs or the addition of new programs which result in additional costs has not been accomplished through a systematic process. The local institution submits a section of their local plan as an improvement request. This may contain such new items as capital expansion, building modification, personnel, or equipment. Since little justification is required, the State Office seldom seriously considers this "want list" in developing their list of priorities for the next year's improvement budget request.
3. Lack of Assessment Data -- Each institution is required to respond to the 5-year State evaluation through the development of a program improvement plan. Also, if any institution fails to maintain State requirements in terms of outcomes, a written response is submitted. The data on substandard programs is not accumulated over time to determine patterns nor is such data adequately utilized in budget planning at the State level. In effect, a snapshot is taken each year of each institution's outcomes, but is not effectively compared to the previous year's results.
4. Add-On Attitude -- The emphasis has been on expanding programs and facilities while maintaining existing programs. Many vocational programs have now been in operation for 15-20 years without a major assessment for continued need or without a significant modification of program, purpose, and content. The acceleration of the impact

> of technology is affecting all programs and a continuous updating is essential. Certainly such updating is taking place at the institutional level and programs are closed each year. However, a process needs to be implemented that carefully examines use of existing resources prior to committing new funds. (Working paper, State Board for Postsecondary Vocational Education staff)

Objectives of Project

With these shortcomings existing throughout the state-wide network of postsecondary vocational schools, the following purposes were identified by the contracting agencies which included the Office of Vocational Education, Georgia State Department of Education and the State Board for Postsecondary Vocational Education:

1. Further refine the concept model
2. Develop model specifications
3. Develop specific criteria for assessment of vocational programs
4. Develop assessment procedures for both state and local level
5. Develop specifications and procedures for designing program improvement plans
6. Develop a comprehensive procedures manual
7. Field-test the system in 5-7 sites
8. Incorporate improvements as indicated by field-test results

The contract period was identified as being December 15, 1984 through June 30, 1985 with final invoices and products to be presented no later than August 30, 1985. The project monitors were identified as Charles Horton from the Office of Vocational Education and John Lloyd from the State Board for Postsecondary Vocational Education.

REVIEW OF PROCEDURES FOLLOWED

The following section describes the procedures followed in accomplishing the objectives of the contract. These are presented in chronological order in order for the reader to obtain a more realistic perspective of the project's scope and sequence. Problems are identified as they were encountered throughout the contract period. Major recommendations for change and followup activities are included in the final section of this report.

Identification of Pilot Schools

The project director met with the project monitors during the first week of December, 1984 for the purpose of identifying the pilot schools to be invited to participate in the project and to review the specific objectives of the contract.

It was felt that every effort should be made to identify schools which represented different patterns of governance, different geographical areas of the state, and different sizes. Consideration was also given to those schools which had been identified as being eligible for planning grants during the following fiscal year. Using those criteria, six schools were initially identified by the project monitors including:

Brunswick Junior College

Macon Area Vocational-Technical School

North or South Georgia Vocational-Technical School

Savannah Area Vocational-Technical School

Griffin-Spaulding Area Vocational-Technical School

Troup Area Vocational-Technical School

Because of prior commitments to other efforts, both North and South Georgia Vocational-Technical School declined to participate in the pilot effort. The directors of the other five schools identified above, however, readily agreed to participate in the project.

Preliminary Presentation to State Board, Postsecondary Vocational Education

At the request of the staff of the State Board for Postsecondary Vocational Education, a preliminary presentation was made to the State Board. The primary purpose of the presentation was to outline an overview of the project activities and to solicit the Board members' input as they might deem appropriate. In that presentation, a differentiation was identified between "strategic planning" and "operational planning" and a preliminary model depicting a suggested sequence of activity at both the state and local levels for strategic and operational planning was reviewed. Refer to Appendix A for a summary of that presentation.

Orientation Meeting, Pilot School Directors

Prior to the initial orientation meeting held with the pilot school directors, a review and synthesis was made of the current state of the art in evaluation, planning and budgeting systems, especially those which had been designed expressly for postsecondary vocational-technical schools throughout the United States. A review was also made of models which are currently used in other institutions of education as well as in business and industry. Particular note was made of system components, criteria,

and standards along with management procedures identified as being requisite for the successful implementation of the systems studied.

Upon completing this preliminary review of the literature, an orientation meeting was called for January 11, 1985 with the project monitors, the pilot school directors and other invited guests including the Executive Director of the State Board for Postsecondary Vocational Education, the Executive Director of the State Advisory Council for Vocational Education, and members of the State Advisory Council as identified by the Executive Director.

One of the major objectives of that orientation meeting was to identify the strengths and weaknesses of the current "system" for evaluation and planning. This was done to help insure that the proposed model capitalized on current strengths as might be identified, while concurrently eliminating the perceived weaknesses of the current system.

The major strengths of the current system as perceived by the group included:

..."It is relatively simple.

..."It incorporates a variety of input from a number of sources."

..."It <u>can</u> result in increased staff."

..."Schools are familiar with the process. It is not new."

..."It is better than nothing."

..."It is based on a state-wide master plan."

..."Doesn't take much time to develop."

..."Provides a fairly objective funding basis."

..."Includes a definitive budget page."

While it was suggested that these strengths be maintained in the proposed model to be developed, the group identified the following as being the primary weaknesses which should be avoided:

..."Lack of adequate involvement with the business community"

..."Inflexibility"

..."No real system for targeting resources"

..."Constant change in rules and regulations with no flexibility at the local level"

..."Process has focused more on expansion than on the re-direction of programs"

..."Not really a plan"

..."Lack of distinction between local application, local plan, and program improvement"

..."Is a fragmented process"

With these characteristics clearly in mind, the discussion focused on the need for the development of an evaluation, planning and budgeting model which would incorporate objective criteria and standards, suggested management procedures for implementing the system at the local level, suggested time-lines for both state and local use, and wide involvement of the local school staff as wall as the business community.

The attention of the group was first directed to the objective identification of criteria which could be used in the assessment of on-going programs. From the study of the literature, twenty-five possible criteria items were identified along with suggested data sources. Each item was typed on a separate card and a set of 25 cards was given to each participant in the group. Without discussion, each person classified each item into one of three categories: (1) major importance, (2) moderate importance, (3) little or no importance.

No restriction was placed on the number of items which could be placed into any one category. Additional cards were provided each participant whereon he/she could record any other criterion item thought to be appropriate.

At the end of the first round, only one additional item had been identified, that being "unmet training need". Of the 25 original items, 21 of them had been placed in category I by one or more participants. The four items not included by Category I by any single participant were eliminated from the pile of cards.

Before beginning the second round, a standard of six was established by the group as beginning the necessary number of "votes" needed for a criterion to remain in the pile for consideration in the third round of voting. The participants then classified the 21 remaining cards into the three categories of importance. Upon completion of round two, thirteen items were identified in Category I by at least six of the participants.

Prior to beginning the third round of voting, the participants were encouraged to discuss the criteria and their rationale for including the items in Category I. Likewise, they were encouraged to argue for the elimination of criteria from Category I. Following discussion, a standard of eight was then established as being necessary to remain as a major criterion of importance in asssessing the effectiveness of on-going programs upon the completion of round three. Upon completion of the third and final round of voting, twelve criteria had been identified as being of "major importance" by eight or more of the participants. These twelve included:

"Trend in quarterly enrollment per instructor for last 3 years"

"Average completion rate per instructor for last 3 years"

"Average placement rate in field or related field for which trained per instructor for last 3 years."

"Employer satisfaction with quality of graduates' work."

"Average percentage of completers passing state licensing exam for last 3 years."

"Average percentage of completers demonstrating acceptable competency levels as measured by standard proficiency measures."

"Capacity and condition of facility."

"Participation and support of business/industry representatives in program planning, operation and evaluation."

"Availability and effectiveness of placement service to program enrollees and graduates."

"Availability and utilization of current training materials in program."

"Unmet training needs."

(Refer to Appendix B for a complete listing of all criteria proposed for the assessment of program effectiveness.)

Concern was expressed that the assessment would become difficult to administer at the local level if all 12 criteria were to be used to assess program effectiveness on an annual basis. At this point, the suggestion was made by the Executive Director of the State Board that consideration be given to identifying criteria for a preliminary assessment of all programs and a secondary assessment of those programs which fail to meet the standards established for that first assessment of all programs.

The discussion which followed subsequently identified three criteria as being critical to program success, namely "enrollment", "completion" and "placement". It was felt that other criteria could be reflected within other criteria, e.g., unmet training need would ultimately be reflected in a program's placement rate. Program enrollment, completion, and placement for the previous three years were thus established as the "yardsticks" for determining effec-

tiveness in the preliminary assessment process.

Six of the twelve criteria placed in Category I were then identified as being of greatest importance in the secondary assessment process. This assessment would be conducted for all programs failing to meet the standards which would be established for the first three criteria. The criteria included in the secondary assessment process included: assessment of facilities, equipment, instructional materials, business support and participation, employer evaluation and student evaluation. A seventh criterion, teacher qualification, was discussed at length with consideration given to such data elements as annual performance appraisal reports, student evaluations, and certification. This criterion was ultimately eliminated from the secondary assessment process as it was felt by the group that it would be adequately addressed in the school's personnel management and staff development program. Too, concern was expressed that personnel problems might arise if such data were publicly displayed.

The group's attention was then turned to the identification of criteria which should be used to justify program initiation or expansion. Since the need for objectivity had been identified as being of critical importance in the design of the proposed model, two alternatives were presented as viable options for the justification of program need and the establishment of priorities. The first alternative is known as the "essential characteristic method" wherein essential criteria for providing such justification are identified within the model. If a proposed program is found to reflect all of the essential criteria, it is identified as a "winner" and becomes eligible for state funding.

The second alternative is referred to as the "weighted factor index method". Like the previous method, essential criteria are identified as being necessary to justify program expansion or initiation. Weights are then assigned to each criterion from which a total weight or profile can be calculated for each proposed program. This method offers the advantages of providing relative weights for each proposed program, and through the use of required minimums, programs can be objectively eliminated from consideration as well as objectively identified as a priority for funding purposes.

Much the same method was followed by the group in identifying those criteria considered to be of major importance in justifying the need for new programs or for program expansion. A total of thirty possible criteria had been previously identified by the project director with each item placed on a single card. Thirty cards were given to each participant to categorize into one of three categories. Additional cards were provided to each participant for the identification of other criteria. Standards were established for each of the three rounds of votes. Discussion was not allowed among the group until after the second round of votes had been taken. Six criteria were identified by the group as the outcome of the third vote, including: trends in demand, unmet need within 50 mile radius of school, statewide demand as evidenced by AEC Study, State Plan or some other source, estimated startup cost, estimated operating cost, and estimated cost per placement. Refer to Appendix C for a complete listing of all 30 criteria.

The orientation meeting concluded with a preliminary review of proposed timelines, a brief critique of the conceptual model as proposed by the State Board staff, and a discussion of the relationship of this project to other project efforts currently underway in the State Board office.

Establishment of Preliminary Definitions and Standards

Based on the input provided by the pilot school directors, the project monitors and representatives from the State Advisory Council in attendance at the orientation meeting, the project director then developed and distributed the following for review by those same individuals:

1. Identification of criteria for the preliminary and secondary assessments including proposed definitions.
2. Suggested forms for use in compiling those data elements.
3. A summary sheet for identifying the outcomes of that assessment.
4. Proposed standards for determining acceptability and categorization of programs based on assessment outcomes.
5. Draft copies of assessment forms proposed for the secondary assessment process along with suggested procedures for data collection
6. A proposed weighted index for justifying new and/or expanded programs.

Refer to Appendix E for a copy of this complete package as distributed.

Prior to the next meeting set for nine days later, the pilot school directors were asked to complete the preliminary assessment process of all programs in their school using the proposed definitions, forms and procedures. Too, they were asked to critique the proposed standards as well as the forms suggested for the secondary assessment process.

The definitions for the three critical criteria, enrollment, completion and placement were subsequently critiqued and refined throughout the next five month period. The ultimate outcome of the group's deliberations was the identification of two major aspects to each of the three criteria. These included:

1. Enrollment
   a. Three-year average enrollment compared to standard
   b. Three-year trend in enrollment compared to standard
2. Completion
   a. Three-year average completion compared to standard
   b. Three-year trend in completion compared to standard
3. Placement
   a. Three-year average placement compared to standard
   b. Three-year trend in placement compared to standard

PROBLEMS ENCOUNTERED:

Numerous problems were encountered in attempting to establish realistic definitions for the three criteria and to identify an accurate data base from which these items could be collected. Among the problems identified were the following:

1. Classification of student reasons for program withdrawal appears to be subjective. Little consistency was found among the pilot schools in interpreting the MIS definitions of withdrawal classifications.
2. Availability for employment appeared to be subjective in its interpretation in that the individual instructor determined the student's availability based on his/her perceived skill level. E.g., if the instructor perceived the student to be lacking in the necessary skills to obtain employment, he/she was subsequently classified as being "unavailable for employment".
3. Considerable difference of interpretation was found in the term "full-time" vs "part-time" enrollment. This difference varied from "weekly enrollment of at least 30 hours" to "weekly enrollment of more than 10 hours".
4. No consistency was found in applying the definition of "full-time" and "part-time" between "day" enrollment and "evening" enrollment.

5. No consistency was found in the definition of the term "completer". One classification in particular, "completion of administrative requirements" could not be interpreted by either project monitor nor by any of the pilot school directors. If the student completed "less than 50%", the reasons most often given for withdrawal were "indifference" or "personal" which at first look, tended to focus the problem on the student rather than the program.

6. The calculation of the number of completers "available for employment" provided the basis for determining the percentage of positive placements. Thus, if students were subjectively eliminated from the total number available for employment on the basis of the instructor's perception of student competency level, the program's subsequent placement rate could be considerably enhanced.

7. Some of the pilot school directors criticized the accuracy of the MIS data in relation to the original data furnished by the schools, whereas other directors felt that the data were accurate and that where errors were made, the MIS staff were working with the school to make the corrections identified.

8. In many instances, a low placement rate seemed to correspond with a high completion rate, whereas a low completion rate appeared to correspond with a high placement rate. The accuracy of this relationship appeared to be questionable based on the inconsistencies in the interpretations of given definitions.

Each of the pilot schools completed the field-test of the preliminary and secondary assessment using the defintions and forms included in Appendix F. It should be noted that this pilot effort incorporated the use of the three criteria of enrollment by taxonomy for past three years, total completion by taxonomy for past three years, and total placement by taxonomy for past three years. The identification of the six indicators as described on the previous page was not completed until after the pilot effort was completed. Consequently, all programs classified as "C" and for which secondary assessments were conducted were those which were identified through the use of the limited criteria.

Upon completing the secondary assessment of those ongoing programs classified in the "C" Category, a review was made of the forms and procedures used in that process. One particular finding was noted in that the assessment of the instructional materials in each of the "C" programs proved to be of little help in attempting to diagnose causes of a given program's deficiencies. In almost every instance, the materials were found to be more than adequate and appropriate for the program. Because of its failure to provide an indication of ineffectiveness, that assessment was subsequently combined with the assessment of equipment into a single instrument and single criterion.

In reviewing the comments and recommendations offered by the users of the forms during the assessment process, the recommendation was frequently made to modify the ratings on the equipment and facilities instruments to a Likert scale rather than a "Yes"/"No" response. Those modifications were made and are reflected in the model subsequently recommended as an outgrowth of the project effort.

It should be noted that in conducting the secondary assessment, those indicators which provided the strongest relationship of possible cause of deficiency or were clues in themselves of problems were "student evaluation", "evidence of business support and involvement" and "employer evaluation". Again, in almost every instance, there appeared to be a direct correlation between the "C" classification and low ratings on one or more of these criteria.

Establishment of Criteria, Standards, Procedures for New/Expanded Programs

While the assessment of on-going programs was being conducted in the pilot schools, the team's attention was turned to the preliminary development

of criteria, standards and procedures for justifying requests for new and/or expanded programs.

A preliminary decision was made to adopt the weighted factor index model as the method which would be used to objectively determine program justification and the establishment of priorities. It was recognized, however, that little of the data called for in the use of the six identified criteria were available at the state and local level, i.e. unmet need within a 50 mile radius, state-wide employment trends, estimated start-up equipment cost, estimated annual operating cost, estimated cost per placement, and evidenced local business/industry support for proposed program. The definitions of those factors and the standards or weights assigned to each are included in the following section which describes the recommended model.

In attempting to "get a handle" on these factors, it was decided that a close look would be taken of the employment data provided in the most recent AEC Study, current data from the Labor Department, the current State Plan, and employment data furnished by the area planning councils. That data, collectively, could provide a basis for the determination of state-wide employment trends and some preliminary information regarding unmet need within a 50 radius of the individual schools. Russ Meade of the State Board staff volunteered to synthesize most of those data elements and subsequently provided each school a computer printout of employment data for each county within each school's service area.

The pilot school directors felt that the determination of unmet need within a 50 mile radius of the school should be the responsibility of that local school. Guided discussions were then conducted to outline preliminary

management plans for conducting local employment surveys. A summary of those suggested procedures and forms are included in Appendix G.

In attempting to begin this process, the pilot school directors quickly recognized the need for adequate staff and resources to complete the task at hand. The need for pre-planning became readily apparent, as did recognition of the fact that the survey in itself represented a major public relations effort necessitating a business demeanor by all staff members involved.

Because of prior commitments to other efforts as well as fulfilling the normal demands of the school's operation, only one school, Savannah Area Vocational-Technical School, was able to complete the pilot effort of determining unmet need for selected occupational areas. Two other schools, Brunswick Junior College and Griffin-Spaulding Area Vocational-Technical School, conducted a more limited unmet need survey within the 50 mile radius of their respective schools. Macon Vocational-Technical School chose to postpone all consideration of new or expanded programs in order to concentrate on the improvement of ongoing programs and to launch a major study the following year at which time the school would be eligible for a planning grant. The fifth school, Troup Vocational-Technical School, simply did not have the staff available to conduct the survey.

The three factors relating to cost in the weighted index were said to be the responsibility of the staff of the State Board (and State Office at the time). Although it was recognized that cost data had to be

generated locally, it was recognized as a state responsibility to synthesize those data elements into state-wide averages.

A simultaneous effort was conducted by the project staff to determine the availability of cost data at the state and local level, to determine the congruence of the data elements, and to determine the consistency in data collection procedures. Five schools were identified by the project monitors as sites which might be examined for cost accounting purposes. The purpose of visiting those schools was to determine the problems which they had encountered in attempting to identify program costs as a basis for internal budgeting. State inventory printouts and other state cost records were reviewed, and cost accounting models developed by other states were studied.

As with the assessment of current program effectiveness uncovered several major problems, so too did the efforts to identify credible data bases for the six factors recommended for inclusion in the weighted index.

PROBLEMS ENCOUNTERED:

Among the major problems encountered were the following:

1. The identification of unmet need data on a state-wide basis has been marginal. The data reflected in the current State Plan are relevant to only a fractional number of the current programs offered. Of the numerous vocational programs identified by the U.S. Department of Education, Georgia offers only a fractional number. Of those programs not offered, the dearth of data is even more evident. This limited data base provides little support to the local school in justifying expanded programs and practically no documentation for the justification of new programs.

PROBLEMS ENCOUNTERED -- continued:

2. The data included in the most recent AEC study likewise provides little help in the identification of unmet need. Its emphasis focuses on current employment and demographic changes which restricts its usefulness primarily to supplemental rather than preparatory vocational education programs.

3. The computerized inventory list of specific program equipment by school is inputed from the 101 form which usually includes equipment items for multiple programs. No procedure was evidenced which specifically earmarked equipment items for particular programs. This included the purchase of both single equipment items, i.e. seed generator charged to Marketing/Merchandising program, as well as quantity lot purchases, i.e. tables and chairs.

4. In most instances, equipment purchases are charged back to the general program taxonomy number rather than to explicit programs, i.e. to 14.0000 rather than to 14.0102. Although it is recognized that many equipment items may be shared in a core curriculum, no attempt is made to determine relative use so as to pro rate the cost of such equipment.

5. In many instances, equipment for given programs is charged to other cost centers in the school, most frequently to "administrative cost". Examples have included "sheet metal", "microscopes" and "student desks/tables".

6. Examples were found wherein equipment purchases were charged to two or more programs. Although pro rated cost should be a basic component in a cost accounting system, double charges for the same equipment is obviously an error.

7. Actual operating cost by program is not maintained at the local level, and there appears to be no attempt to identify cost differentials among programs at the state level. Little or no differentiation can be made between high cost and low cost programs. Cost allocations are most often made by teacher unit and have little relationship to program enrollments or to unique costs associated with given programs.

8. In most instances the cost data identified related to "day" programs only which adds another dimension of ambiguity and distortion to the determination of cost per completion and cost per placement.

The establishment of a cost accounting system which is uniform throughout the state will apparently not be an easy task. A review of cost studies and systems established in other states reveals multiple problems. Three models which do show promise, however, are described in abbreviated form in Appendix H.

Intermediate Critique

After the project had been underway some three months, a need was felt to have the team critique the total process to date. At that point, all of the schools had completed the preliminary assessment of all programs, most had completed the secondary assessment of their "C" programs, and several had completed their followup Program Improvement Plans for their "C" programs. Little had been done, however, in initiating the local surveys to determine the unmet need for selected programs.

A series of questions was posed to the team members when they assembled for their monthly project meeting. They were asked to respond in writing to each question and to refrain from discussing the items until after the process had been completed. The questions posed as incomplete statements included:

"In regard to the three criteria/indicators identified for the preliminary assessment of program effectiveness, my major concerns are —— "

"My recommendations are ——"

"In regard to the criteria identified for secondary assessment of program effectivenss, my major concerns are —— "

"My major recommendations are —— "

"In considering the recommendation of combining the criteria into one assessment for all programs, my reaction is —— "

"In regard to the proposed standards set for the assessment of ongoing programs, my primary recommendation is --- "

"In regard to the procedures proposed, my primary recommendation is --- "

"Of the total assessment process for ongoing programs to date, the three strongest features are --- "

"Of the total assessment process for ongoing programs to date, the three weakest features are --- "

"My three recommendations for addressing the weaknesses are --- "

All comments, reactions and recommendations generated by the team members were reported on a followup form. This instrument asked the team members to indicate agreement or disagreement in writing to each of the comments listed under each question. A space was also provided for their comments in reaction to each item. The instrument used for this exercise is included in Appendix I.

The major strengths of the total assessment process as identified by the group at that point in time included:

"Three standards for primary assessment. Comprehensiveness of criteria. Followup plan for program improvement."

"Organized plan of action and good leadership. Method of organizing program modification good."

"Local involvement. Systematic process. Timing."

"Provides a formal system of evaluation consistent all over the state. Provides for recommendations to improve weak programs. Provides for budget request to modify, expand.

The major weaknesses identified at that point included:

"Use of averages."

"Credibility of figures."

"Data base if poor. MIS definitions are vague."

Two months later, or by the end of May, the team had concluded their efforts in the identification of criteria or indicators which would reflect the "general health" of ongoing programs, the identification of standards or yardsticks against which that health could be judged, and the description of suggested management procedures for conducting the assessment process and for outlining followup Program Improvement Plans. Although the accuracy of the data base was still questionnable, the team seemed satisfied that the identification of the six indicators with their accompanying standards and procedures were viable factors which could provide a quick "pulse" of a program's effectiveness. Too, they felt that the criteria used in the secondary assessment process could provide "partial clues" to causes of program deficiencies, but that the complete diagnosis was dependent upon the ability of the management and instructional staffs. All of the team members recognized the need for developing and maintaining a more accurate data at the local school level from which direct input could be made into the state MIS system (or comparable system developed by the staff of the State Board for Vocational Education).

Little objective reaction or input could be given by the team at the end of May relative to the further refinement of the recommended weighted index and its criteria, weights and suggested procedures. This, of course, was reflected of the limited field-test effort conducted by the pilot schools due primarily to the major restrictions of adequate resources at the local level to undertake that type of effort and the lack of state-wide data regarding employment trends and costs.

The evaluation, planning and budgeting model as recommended by the team as a result of the total project effort is described in the following section.

THE RECOMMENDED EVALUTION, PLANNING AND BUDGETING MODEL

Planning is predicated on two major data items: knowing where you are and where you want to go which necessitates a comprehensive evaluation effort as a preclude to planning. Using an accurate data base, the process of planning becomes one of identifying, selecting and organizing alternative strategies for reaching the desired destination. The budgeting component follows as a logical outgrowth of the planning process in that it identifies the resources needed to implement the plan effectively and efficiently.

This integrated process is reflected in the schematic of the model depicted on the following two pages. The evaluation of on-going programs is seen to include two assessment processes, one for all programs and a followup assessment for those programs which fail to meet state standards. The followup of that assessment process is the development of a comprehensive Program Improvement Plan which outlines specific actions to be taken, together with timelines and staff assignments for either bringing that given program up to state standards, modifying or redirecting the primary focus of the program, or outlining an orderly termination of the program. The resources requisite for conducting those activities outlined in the Program Improvement Plan are reflected in its accompanying budget.

Likewise, the assessment of need for new or expanded programs is conducted with a focus on six major criteria which are subsequently compiled into a weighted index with priorities identified. Specific activities for initiating the new or expanded program are comprehensively outlined in the Program Initiation/Expansion Plan with its requisite costs reflected in the accompanying budget document.

EVALUATION, PLANNING & BUDGETING MODEL

EVALUATION: ON-GOING PROGRAMS

PRIMARY ASSESSMENT: ALL PROGRAMS

KEY INDICATORS:

Enrollment:
- 3 yr average to standard
- 3 yr trend

Completion:
- 3 yr average to standard
- 3 yr trend

Placement:
- 3 yr average to standard
- 3 yr trend

SECONDARY ASSESSMENT: "C" PROGRAMS

KEY INDICATORS:

- Employer Evaluation
- Student Evaluation
- Assessment of Facilities
- Assessment of Equipment & Instructional Materials
- Assessment of Business Support

PLANNING: PROGRAM IMPROVEMENT PLAN FOR "C" PROGRAMS

IDENTIFY:

- Cause(s) for Deficiency
- Corrective Action to be Taken
- Program Improvement Objectives
- Strategies for Accomplishment
- Specified Timelines
- Specified Staff Assignments
- Evaluation Measures

EVALUATION: NEW/EXPANDED PROGRAMS

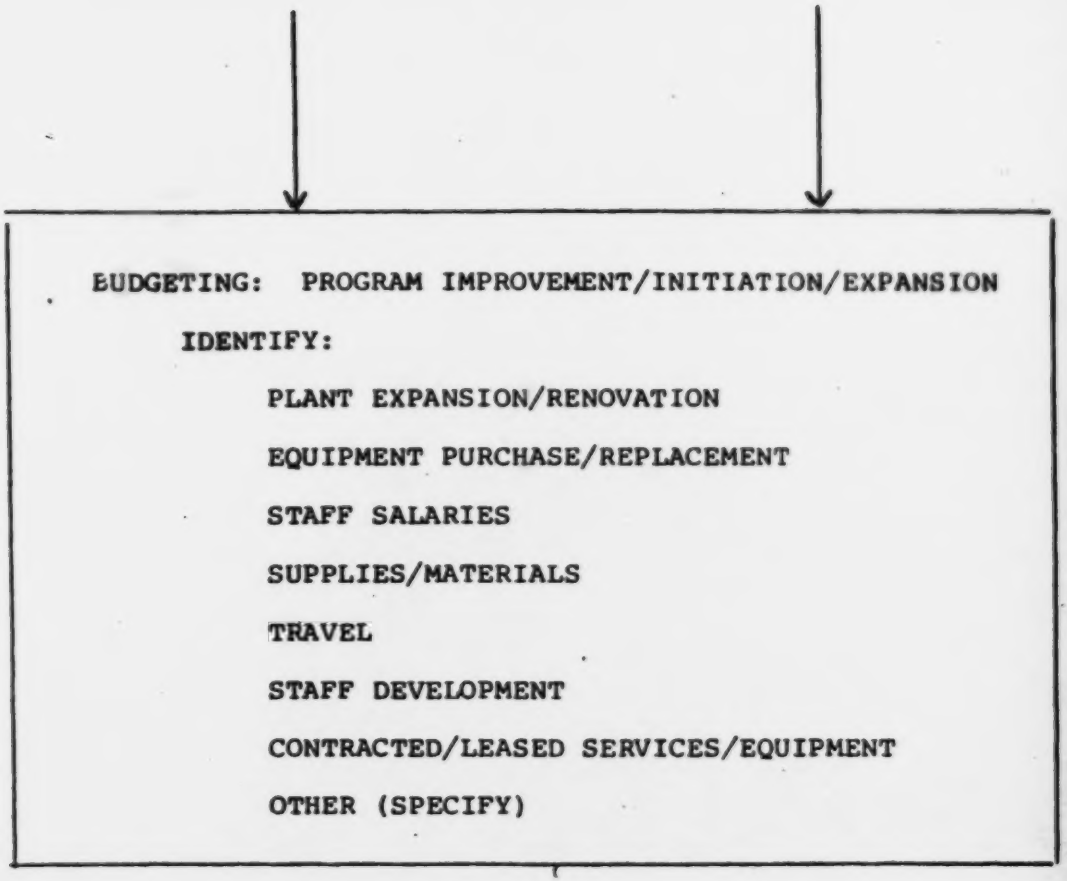
KEY INDICATORS:

- STATE-WIDE EMPLOYMENT TRENDS
- UNMET NEED WITHIN 50 MILE RADIUS
- ESTIMATED START-UP EQUIPMENT COST
- ESTIMATED ANNUAL OPERATING COST
- ESTIMATED COST PER PLACEMENT
- EVIDENCED LOCAL BUSINESS/INDUSTRY SUPPORT FOR PROGRAM

PLANNING: PROGRAM INITIATION/EXPANSION PLAN

IDENTIFY:

- Documentation of justification
- Specific Program Objectives
- Strategies for Accomplishment
- Specified Timelines
- Specified Staff Assignments
- Evaluation Measures


BUDGETING: PROGRAM IMPROVEMENT/INITIATION/EXPANSION
IDENTIFY:
PLANT EXPANSION/RENOVATION
EQUIPMENT PURCHASE/REPLACEMENT
STAFF SALARIES
SUPPLIES/MATERIALS
TRAVEL
STAFF DEVELOPMENT
CONTRACTED/LEASED SERVICES/EQUIPMENT
OTHER (SPECIFY)

EVALUATION: ON-GOING PROGRAMS
KEY INDICATORS AND DEFINITIONS

PRIMARY ASSESSMENT:

ENROLLMENT: Total enrollment by taxonomy of students enrolled on a full-time basis in occupational education programs; (Refer to State Board for current definition of "full-time")

3-YEAR AVERAGE ENROLLMENT BY INSTRUCTOR: Average annual enrollment by instructor by taxonomy over a three year period compared to established standard

3-YEAR TREND IN AVERAGE ENROLLMENT BY INSTRUCTOR: Comparison of first year average annual enrollment by instructor to third year average annual enrollment by instructor

COMPLETION: Includes the total number of graduates and students who have completed the program with certifiable job skills and who are available for employment.

3-YEAR AVERAGE COMPLETION BY INSTRUCTOR: Average annual completion by instructor by taxonomy over a three year period compared to established standard

3-YEAR TREND IN AVERAGE COMPLETION BY INSTRUCTOR: Comparison of first year average annual completion by instructor to third year average annual completion by instructor

PLACEMENT: Includes the total number of positive placements identified as the number employed in field for which trained, number employed in a related field, number continuing their education and number entering the military.

3-YEAR AVERAGE PLACEMENT BY INSTRUCTOR: Average annual placement by instructor by taxonomy over a three year period compared to established standard

3-YEAR TREND IN AVERAGE PLACEMENT BY INSTRUCTOR: Comparison of first year average annual placement by instructor to third year average annual placement by instructor

SOURCE OF DATA: MIS unduplicated enrollment report issued Fall Quarter each year (NOTE: Until such time as the MIS system applies the definition of full-time student consistently to both day and evening programs, enrollment data may have to be obtained from school attendance reports.)

EVALUATION: ON-GOING PROGRAMS

SUMMARY OF PROPOSED CATEGORIAL STANDARDS

KEY INDICATOR	CATEGORY A (90% WT)	CATEGORY B (80% WT)	CATEGORY C (70% WT)
PRIMARY ASSESSMENT:			
3 YR AVERAGE ENROLLMENT BY INSTRUCTOR TO STANDARD	14+	10-14	Less than 10
3 YR ENROLLMENT TREND BY INSTRUCTOR	Increase of more than 10% OR stable enrollment of 14+ (Category A) for 3-year period	Increase/ decrease of no more than 10%	Decrease of more than 10%
3 YR AVERAGE COMPLETION BY INSTRUCTOR TO STANDARD	10+	8-10	Less than 8
3 YR COMPLETION TREND BY INSTRUCTOR	Increase of more than 10% OR stable completion of 10+ (Category A) for 3-year period	Increase/ decrease of no more than 10%	Decrease of more than 10%
3 YR AVERAGE PLACEMENT BY INSTRUCTOR TO STANDARD	8+	6-8	Less than 6
3 YR PLACEMENT TREND BY INSTRUCTOR	Increase of more than 10% OR stable placement of 6+ (Category A) for 3-year period	Increase/ decrease of no more than 10%	Decrease of more than 10%
SUMMARY CATEGORIZATION	CATEGORY A Average of +87% weight for 6 indicators	CATEGORY B Average of 74-87% weight for 6 indicators	CATEGORY C Average of less than 74% weight for 6 indicators

EVALUATION OF ON-GOING PROGRAMS: KEY INDICATORS AND DEFINITIONS

EMPLOYER EVALUATION OF STUDENTS: Annual employer evaluation conducted by state MIS system in cooperation with the local school to determine the employers' assessment of such items as technical knowledge, work attitude, work quality, relative preparation and overall rating of student performance.

STUDENT EVALUATION OF PROGRAM: Annual student evaluation of program conducted by state MIS system in cooperation with the local school school to determine the students' assessment of such items as job preparation, instructional content, tools and equipment, teacher presentations in class, teacher presentations in laboratory, organization of instruction, grading and testing procedures, interest of the instructor, and class size.

ASSESSMENT OF FACILITIES: Annual assessment of appropriateness and condition of program facilities as determined by a team composed of the instructional coordinator, instructor, advisory committee member and others as may be designated locally, using an established instrument.

ASSESSMENT OF EQUIPMENT AND INSTRUCTIONAL MATERIALS: Annual assessment of appropriateness and condition of program equipment and instructional materials as determined by a team composed of the instructional coordinator, the instructor, an advisory committee member and others as may be designated locally, using an established instrument.

ASSESSMENT OF BUSINESS SUPPORT AND PARTICIPATION: Annual assessment of extent to which the business/industrial community have supported the program and representatives have participated in designed program support activities. This assessment is conducted annually by the instructional coordinator together with the instructor using an established instrument.

SOURCES: The MIS employer and student followup reports completed annually and issued during the Fall Quarter will be used to as the data source for the EMPLOYER ASSESSMENT and for the STUDENT ASSESSMENT. Refer to the EPB-MODEL proposed forms for ASSESSMENT OF FACILITIES, ASSESSMENT OF EQUIPMENT AND INSTRUCTIONAL MATERIALS, AND ASSESSMENT OF BUSINESS SUPPORT AND PARTICIPATION.

SUMMARY OF PROPOSED CATEGORIAL STANDARDS -- SECONDARY ASSESSMENT

KEY INDICATOR: SECONDARY ASSESSMENT	CATEGORY A (Healthy sign; look elsewhere for cause of problem)	CATEGORY B (May be some cause for concern; keep an eye on this)	CATEGORY C (Definite cause for concern; investigate)
3 YEAR AVERAGE, EMPLOYER OVERALL RATING	4.5 and above	4.0-4.4	Less than 4.0
3 YEAR AVERAGE, MEAN STUDENT RATING	90% and above	80-89%	Less than 80%
ASSESSMENT OF FACILITIES	Total rating of 62 or over	Total rating of 42-61	Total rating of less than 42
ASSESSMENT OF EQUIPMENT & MATERIALS	Total rating of 62 or over	Total rating of 42-61	Total rating of less than 42
ASSESSMENT OF BUSINESS SUPPORT/PARTICIPATION	14 or more YES	11-13 YES	Less than 11 YES

STUDENT EVALUATION

ROGRAM TITLE & TAX. #	JOB PREP.	INSTRUC. CONTENT	TOOLS & EQUIP.	PRES. IN-CLA.	PRES. IN-LAB	ORG. INST.	GRAD/ TEST	INST. INT.	CLASS SIZE	MEAN RATING
										30
159										160

DIRECTIONS: Use MIS Follow-up Report, Fall 1984 for data. Calculate average of nine items to determine "mean rating" in last column. Enter percentage and category of program effectiveness using the following standards for the last column: CATEGORY A = 90%+, CATEGORY B = 80-89%, CATEGORY C = less than 80%.

EMPLOYER EVALUATION OF STUDENTS

PROGRAM TITLE & TAXONOMY #	TECHNICAL KNOWLEDGE	WORK ATTITUDE	WORK QUALITY	OVERALL RATING	RELATIVE PREPARA.	MEAN RATING ALL ITEMS	CATEGOI
							31
							162

Directions: Use MIS Follow-up Report, Fall 1984 for data. Calculate average of five items to determine "mean rating, all items". Identify category of program effectiveness using the following standards for the last column: CATEGORY A = 4.5+; CATEGORY B = 4.0-4.4 CATEGORY C = Less than 4.0.

ASSESSMENT OF BUSINESS SUPPORT AND PARTICIPATION

Please identify those criteria identified below for which you find evidenc of business/industry participation and support in program planning, operation, and/or evaluation.

	YES	NO
1. Provided input to instructional staff re program objectives, content outline, instructional activities.	____	____
2. Reviewed course outlines and materials for appropriateness.	____	____
3. Provided opportunities for student internships, practicuums, OJT, and/or clinical experiences.	____	____
4. Provided opportunities for instructor to update technical skill by participating in in-house activities.	____	____
5. Served as guest speaker/guest lecturer.	____	____
6. Provided training materials appropriate to instructional objectives of program.	____	____
7. Provided equipment on loan and/or donated equipment appropriate for use in the instructional program.	____	____
8. Assessed adequacy of program's facilities and equipment.	____	____
9. Assessed adequacy of program's instructional materials and supplies.	____	____
10. Referred other business/industry representatives to program staff.	____	____
11. Referred his/her employees to program for refresher training and/or requested in-house training of employees by instructional staff.	____	____
12. Assisted in developing maintenance, safety and security policies/procedures for the operation of the program.	____	____
13. Arranged visits to business/industry plants for faculty and/or students.	____	____
14. Promoted/publicized the program to company employees, their families, other business and/or the general community through each media as house organs, bulletin boards, news stories, civic club presentations.	____	____
15. Provided career and job placement advice to students.	____	____
16. Sponsored scholarships or other financial assistance to students.	____	____
17. Provided recognition for outstanding students.	____	____
18. Recruited and hired program completers.	____	____

OTHER _____

ASSESSMENT OF EQUIPMENT AND INSTRUCTIONAL MATERIALS

Please check the response which most closely approximates your opinion and include any additional comments which you may deem appropriate. Use the scale below as a guide to identify your response.

5 -- Excellent in all respects; excellent condition
4 -- One or two items may need some repair; but overall in good condition
3 -- Several items are in need of repair and/or replacement; overall condition is fair
2 -- The majority of the items are in need of repair and/or replacement; overall condition is poor
1 -- Practically all of the items are in need of repair and/or replacement; condition is unacceptab
N/A - Statement does not apply to local situation.

1.	The equipment in the laboratory reflects current technology and is presently being used in business/industry.	NA	1	2	3	4
2.	The type, variety and quantity of tools and equipment are adequate and appropriate for meeting the instructional objectives of the program.	NA	1	2	3	4
3.	The equipment and tools are in good repair.	NA	1	2	3	4
4.	The equipment is sufficiently durable for the identified instructional purposes.	NA	1	2	3	4
5.	The equipment is basically hazardless to use when operated according to instructions.	NA	1	2	3	4
6.	The equipment is appropriate and safe for use by handicapped students.	NA	1	2	3	4
7.	Cut-off switches for machines and equipment are easily identifiable and reachable from the operator's position.	NA	1	2	3	4
8.	Safety guards, where appropriate, are provided and are secured to the machines.	NA	1	2	3	4
9.	All machines and equipment, except portable machines and equipment, are appropriately secured as needed to prevent walking or moving.	NA	1	2	3	4
10.	Equipment and tools are properly stored.	NA	1	2	3	4
11.	The instructional materials are current and reflect contemporary concepts and practices.	NA	1	2	3	4
12.	The instructional materials are appropriate for the accomplishment of the identified objectives.	NA	1	2	3	4
13.	The materials are written at a reading level appropriate to the average student enrolled in the program.	NA	1	2	3	4
14.	Alternative instructional materials are provided for special needs students.	NA	1	2	3	4
15.	The instructional materials provide appropriate problem solving activities which will enhance the transfer of learning to alternative work environments and situations.	NA	1	2	3	4

COMMENTS: _____

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ASSESSMENT OF FACILITIES

Please circle the response which most closely approximates your opinion and include any additional comments which you may deem appropriate. Use the scale below as a guide to identify your response.

5 -- Excellent condition
4 -- Good condition
3 -- Fair condition
2 -- Poor Condition
1 -- Condition is unacceptable
N/A - Item does not apply to local situation

1. The facility is comparable to or simulates current business facilities for that occupational area.	NA	1	2	3	4	5
2. The facility is located next to other comparable or related facilities where appropriate, e.g. auto body/auto mech.	NA	1	2	3	4	5
3. Space allocations for classrooms are appropriate for the number of students enrolled.	NA	1	2	3	4	5
4. Space allocations for laboratories are appropriate for the number of students enrolled.	NA	1	2	3	4	5
5. Space allocations for storage areas are appropriate for the type of program and number of students enrolled.	NA	1	2	3	4	5
6. The external structures--roof, walls, entrances--are in good condition and are structurally sound.	NA	1	2	3	4	5
7. The adjacent internal structures--stairs, corridors, lobbies--are safe, structurally sound, and attractive.	NA	1	2	3	4	5
8. Environmental conditions--heating, cooling, lighting, accoustics, brightness--are condusive to learning.	NA	1	2	3	4	5
9. The arrangement of the instructional areas flexible and adequate for a variety of learning activities.	NA	1	2	3	4	5
10. Storage facilities are adequate and are easily accessible.	NA	1	2	3	4	5
11. Handicapped and/or physically disabled students have access to space that accommodates their needs.	NA	1	2	3	4	5
12. Fire resistant storage areas are available to store combustible material.	NA	1	2	3	4	5
13. Fire extinguishers are accessible where appropriate and are in good condition.	NA	1	2	3	4	5
14. Electrical outlets and control switches are in safe condition and are readily accessible.	NA	1	2	3	4	5
15. The heating and ventilation system maintains comfortable and healthful conditions including properly installed filtering for smoke, odors, fumes, gases.	NA	1	2	3	4	5

COMMENTS _____

_____

PROGRAM IMPROVEMENT PLAN FOR "C" PROGRAMS

PROGRAM: _____

MAJOR DEFICIENCY AS NOTED FROM ASSESSMENT CRITERIA: _____

IDENTIFIED CAUSE(S) FOR DEFICIENCY _____

_____

FOLLOW-UP ACTION TO BE TAKEN:

Activity	Timelines	Person Responsible

BUDGET REQUIREMENTS, IF ANY, OVER-AND-ABOVE REGULAR FUNDING:

Category	Amount	Justification
Salary		
Travel		
Staff Development		
Equipment		
Supplies/Materials		
Other (Specify)		
TOTAL		

EVALUATION: NEW AND EXPANDED PROGRAMS
KEY INDICATORS FOR PROGRAM JUSTIFICATION

STATE-WIDE EMPLOYMENT TRENDS: Increase, decrease or stable employment trends evidenced on a state-wide basis for the occupation(s) under consideration as determined by the Department of Labor, the staff of the State Board for Postsecondary Vocational Education, or other sources as identified by the staff of the PVE Board.

UNMET NEED WITHIN 50 MILE RADIUS: Difference between employment demand (including additions and replacements) and estimated employment supply for the occupation(s) under consideration within a 50 mile radius of the school as determined by the staff of the school using instruments and procedures approved by the staff of the PVE Board.

ESTIMATED START-UP EQUIPMENT COST: The total cost estimated by the staff of the PVE Board to either initiate a new program in a designated occupational area and/or to expand a given program using state-wide average cost figures for individual instructional programs; such cost data to be generated through a state-established cost accounting system.

ESTIMATED ANNUAL OPERATING COST: The total cost estimated by the staff of the PVE Board to operate a designated instructional program for a year using state-wide average cost figures for individual instructional programs; such cost data to be generated through a state-established cost accounting system.

ESTIMATED COST PER PLACEMENT: The total cost estimated by the staff of the PVE Board per positive placement in a designated instructional program using state-wide average cost figures for individual instructional programs; such cost data to be generated through a state-established cost accounting system.

EVIDENCED LOCAL BUSINESS/INDUSTRY SUPPORT FOR PROPOSED PROGRAM: The interest and support of the business and industrial community within a 50 mile radius of the school as evidenced on survey instruments approved by the staff of the PVE Board and used by the staff of the local school to identify UNMET NEED.

EMPLOYMENT DEMAND SURVEY

COMPANY _____ DATE _____

ADDRESS _____

CITY, STATE, ZIP _____

TELEPHONE(s) _____

CONTACT PERSON _____ TITLE _____

For the items given below, simply check the response which best represents your opinion or specify your "other" response where appropriate. On the second page, please furnish your demand estimates for the occupations identified. Thank you for your assistance.

1. Does your company currently provide in-house training for your employees?

___ Yes ___ No

2. If YES, identify the type(s) of training provided. Check as many as are applicable.

___ OJT
___ Apprenticeship
___ Formal classes
___ Pay tuition for employee to attend designated classes
___ Contract with outside agencies/persons for designated training
___ Other, Specify _____

3. Major source of recruitment for the occupations identified on page 2.

___ Area voc-tech schools
___ High schools
___ Private schools
___ Junior colleges
___ Colleges/universities
___ Other companies
___ Other, specify _____

4. Typical level of training required by your company in hiring persons for occupations identified on page 2.

___ High School Diploma
___ Area Voc-Tech School Certificate/Degree
___ Junior College, Associate Degree
___ 4-Year College Degree
___ OJT
___ Apprenticeship
___ Other, specify _____.

5. If a full-time program were offered to prepare persons for the occupatio identified on page 2, would you and the management staff of your company support the program in the following ways. Check those applicable.

___ Serve on advisory committee
___ Advise on curriculum materials
___ Serve as guest speaker
___ Provide training materials
___ Provide equipment
___ Provide OJT, internships for students
___ Provide OJT, internships for program instructors
___ Refer other businesses to progr
___ Refer employees to program
___ Arrange company tours
___ Evaluate program
___ Publicize program in company
___ Sponsor scholarships
___ Recruit program graduates
___ Other, specify _____

If you could not support this type of program, why not _____

_____

EMPLOYMENT DEMAND SURVEY

OCCUPATIONAL TITLE	# CURRENTLY EMPLOYED	TREND OVER LAST 5 YRS		AVERAGE ANNUAL # NEW JOBS ADDED	AVERAGE ANNUAL # OF REPLACEMENTS HIRED	TOTAL ANNUAL DEMAND: NEW + REPLACEMENTS
		UP	DOWN			

170

171

UNMET NEED PROJECTIONS

OCCUPATIONAL TITLE	DEMAND ESTIMATES			SUPPLY ESTIMATES			NET UNMET NEED
	TOTAL NEW ADDITIONS	TOTAL NUMBER REPLACEMENTS	TOTAL DEMAND	COMP. OF VOC PROG.	OTHERS, INC. PRIV. SCHOOLS	TOTAL SUPPLY	
172							173

ROGRAM: _____ PLANNING GUIDE :

SPECIFIC OBJECTIVES	RATIONALE	STRATEGIES/ACTIVITIES PLANNED TO ACHIEVE OBJECTIVE	STRATEGY TIMELINES	
			PLANNED DATE OF COMPLE.	ACTUAL COMPLE.

40

174

175

PROGRAM INITIATION OR EXPANSION

PERSON(S) RESPONSIBLE	FACILITIES, SUPPLIES, EQUIPMENT PERSONNEL NEEDED (SPECIFY)	BUDGET REQUIREMENTS BASED ON PREV. COL.	EVALUATION MEASURES	MANAGEMENT SIGN-OFF

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SUMMARY SCHEDULE FOR DATA COLLECTION, EVALUATION, PLANNING, BUDGETING

FY (3rd Out Yr) -- Data collection of enrollment, completion and placement by taxonomy by instructor; includes Summer Quarter through Spring Quarter; data taken from MIS unduplicated enrollment report issued Fall Quarter

FY (2nd Out Yr) -- Data collection of enrollment, completion and placement by taxonomy by instructor; includes Summer Quarter through Spring Quarter; data taken from MIS unduplicated enrollment report issued Fall Quarter

FY (1st Out Yr) -- Data collection of enrollment, completion and placement by taxonomy by instructor; includes Summer Quarter through Spring Quarter; data taken from MIS unduplicated enrollment report issued Fall Quarter

CURRENT FISCAL YEAR --

SUMMER QUARTER -- Preliminary plans made to assess unmet need within 50 mile radius of school for new or expanded programs; review made of state-wide employment trends and demand

FALL QUARTER -- Conduct assessment of all on-going programs; conduct secondary assessment of programs categorized as "C" by six key indicators. Complete assessment of unmet need for new or expanded programs; review cost data from state; complete weighted index profile of all proposed program additions and/or expansions to determine priority

WINTER QUARTER -- Complete Program Improvement Plan of follow-up measures to be taken for all "C" programs and others as may be needed. Identify budget need requirements for measures identified in Program Improvement Plan. Complete Program Planning Guide for New and Expanded Programs. Identify budget need requirements for components identified in Program Planning Guide. Submit assessment data from on-going programs, weighted index profile with program priorities, Program Improvement Plan, Program Planning Guide, and budget requests to the state staff of the State Board for Postsecondary Vocational Education.

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RECOMMENDATIONS FOR STAFF OF STATE BOARD FOR POSTSECONDARY VOCATIONAL EDUCATION

The recommendations presented below reflect those of the project director based on both formative and summative evaluations. It is the hope that these recommendations will be given serious consideration by both the staff and the State Board members as you work collectively to strengthen the state-wide network of postsecondary and adult vocational education programs in Georgia.

RECOMMENDATIONS

1. The model, as recommended wherein by the project team, should be field-tested on a state-wide basis. For those schools which were not involved in this pilot effort, their primary focus should be on the assessment of on-going programs with the subsequent development of Program Improvement Plans and accompanying budget documents. For those schools which were involved in this pilot effort, their primary focus should be on needs assessment for new and expanded programs.

2. A comprehensive, continuous program of staff development should be specifically designed and conducted to develop those competencies requisite for the implementation of the evaluation, planning and budgeting model at the local school level. The staff development programs should be designed for "management teams" in the respective schools rather than for single representatives. This effort should be initiated during the Fall of 1985 and continue throughout the next two-year period.

3. An effort should be made to identify the resources requisite for successfully implementing the model at the local and state levels. Pre-planning activities should be outlined, scheduled and resources provided to help assure success.

4. As the model is field-tested on a state-wide basis, further attention should be given to the refinement of the definitions of primary indicators/criteria recommended in the model. Every effort should be made to assure congruence among the defintions used for the same terms in different staff efforts.

RECOMMENDATIONS — continued

5. Changes should be made in the state's local application process to reflect budget requests which are the outgrowth of an integrated evaluation and planning effort at the local level. Program Improvement Plans should accompany budget applications for ongoing programs with particular focus on those programs classified as "C" programs. Program Intiation/Expansion Plans should accompany budget applications for new and expanded programs. The criteria and standards recommended in the model or as may be subsequently refined should be closely adhered to by the local staff in submitting budget applications and by the State Board staff in reviewing those applications for forwarding to the Office of Planning and Budgeting.

6. A uniform cost accounting system should be established for utilization in all area schools throughout the State. Within the system, uniform definitions should be established along with uniform procedures wherein actual program costs can be identified.

7. A business manager qualified in cost accounting should be provided in each of the area schools throughout the State.

8. A state-wide data base should be established and computerized which includes the identification of unmet need for at least all of the four-digit program taxonomy codes identified by the U.S. Department of Education. The data should be continuous updated and formated to serve local, regional and state-wide needs. In addition to unmet need projections, the state data base should include data on major demographic characteristics and projected changes, as well as data on current employment which could be used as a basis for supplemental program planning.

9. A Management Information System should be specifically designed to meet the needs of the postsecondary schools. The system should provide for direct input by the local schools into a state-wide data bank, the establishment of clear, uniform definitions of terms, and intense staff development programs for the schools' total management team in the interpretation of the terms and the uniform use of common procedures.

10. In implementing the model on a state-wide basis, particular attention should be focused on the definition of the terms "full-time" and "part-time". Attention should be given to the development of innovative configurations of program formats, schedules and site locations in order to meet the needs of persons for both preparatory and supplemental programs regardless of the time of day or program location.

APPENDIX A

SUMMARY, STATE BOARD PRESENTATION
DECEMBER 6, 1984

POST SECONDARY BOARD FOR VOCATIONAL EDUCATION

PLANNING, EVALUATION & BUDGETING MODEL

DECEMBER 6, 1984

TWO MAJOR TYPES OF PLANNING

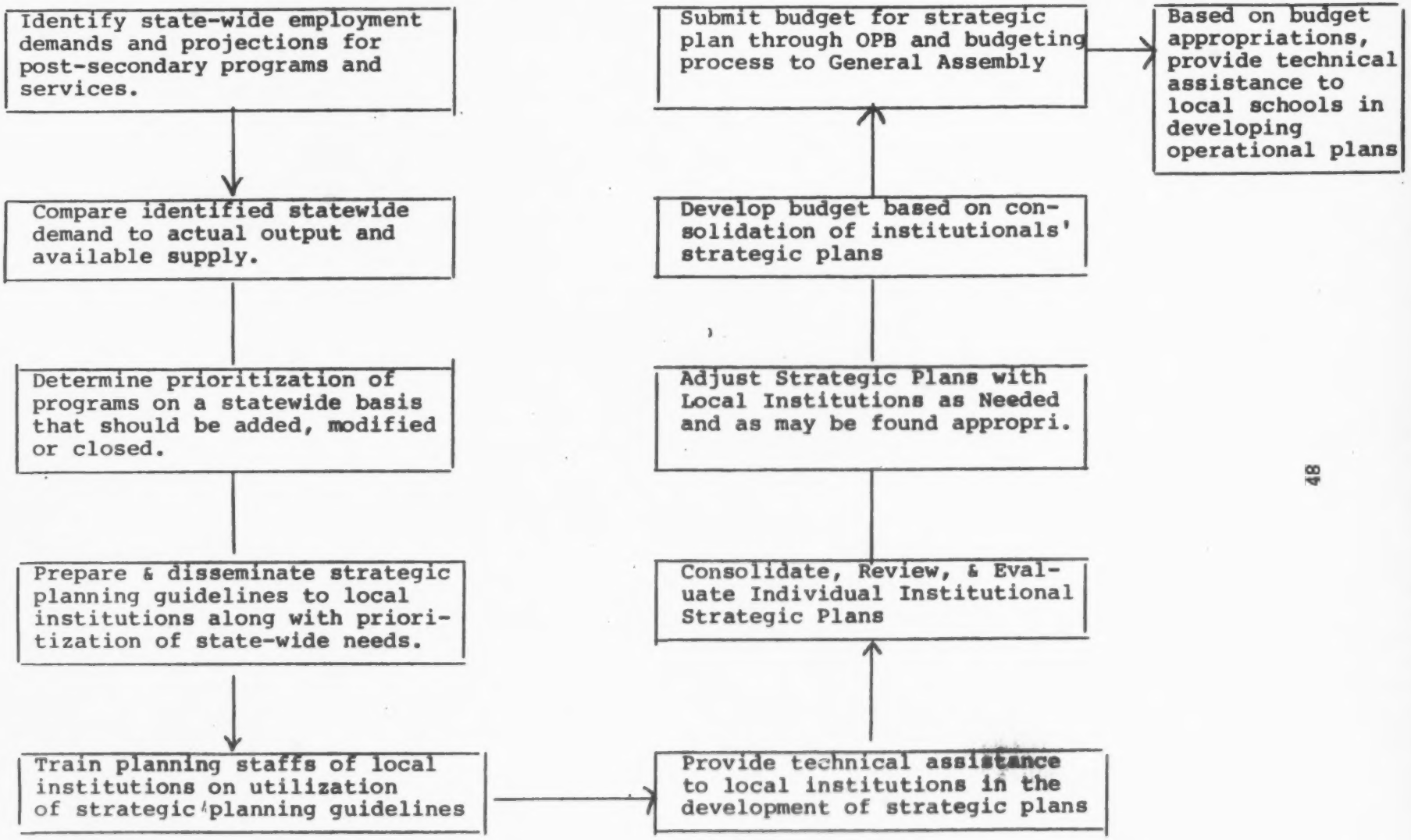
STRATEGIC PLANNING

- *Has a relatively long time frame.
- *Is fairly broad in scope.
- *Includes the basis for the identification of short-term program objectives.
- *Identified to improve the performance in order to accomplish the mission and educational goals of the institution.
- *Includes a high involvement of central planning unit administrators.

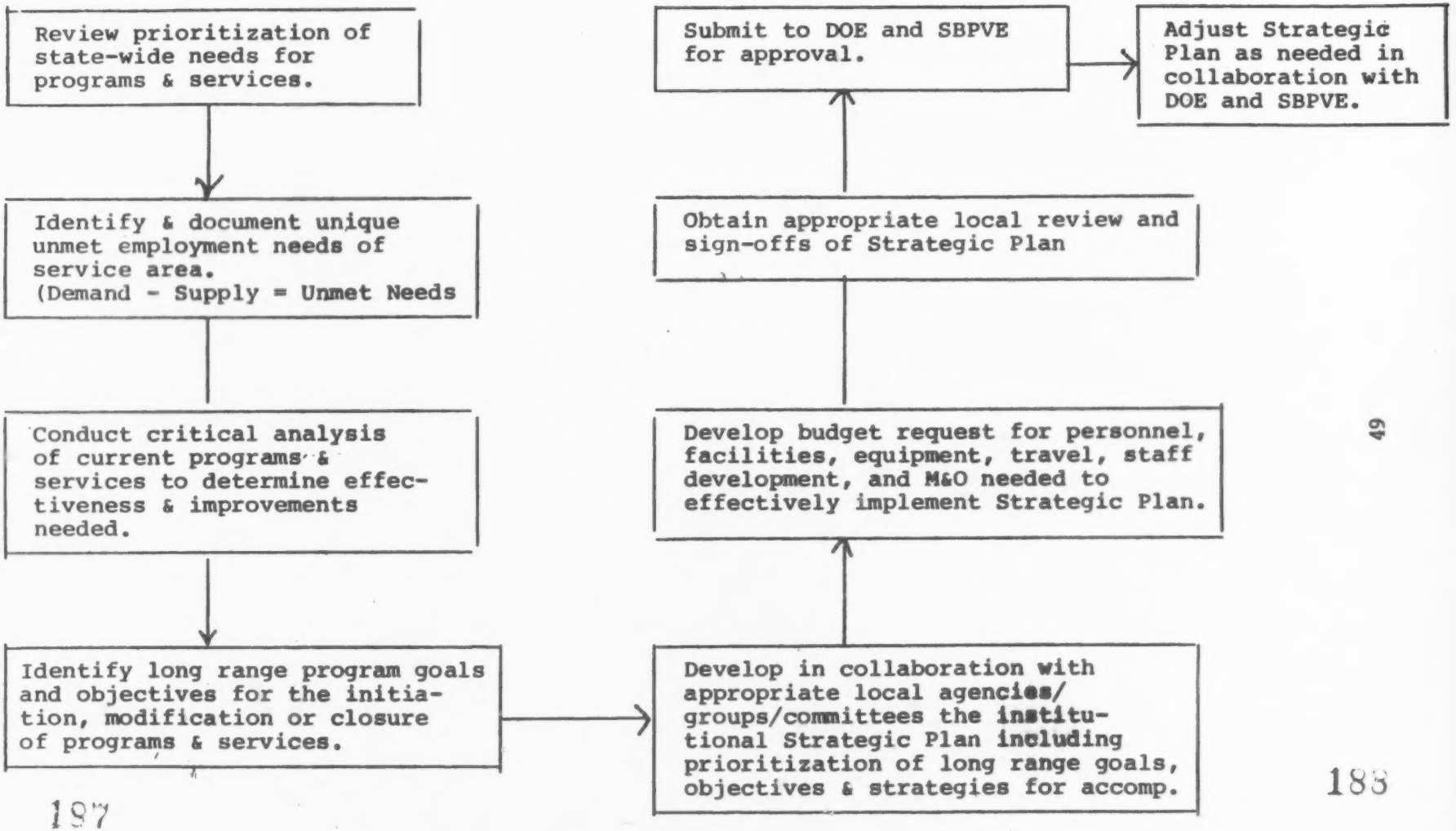
OPERATIONAL PLANNING

- *Has a short time frame.
- *Is narrow in scope.
- *Assumes that a set of broad organizational goals and objectives exist (Strategic Plan)
- *Includes specifically defined objectives, tasks/activities and timelines for implementation
- *Greater number of people involved both externally and internally--usually includes all staff members to some extent

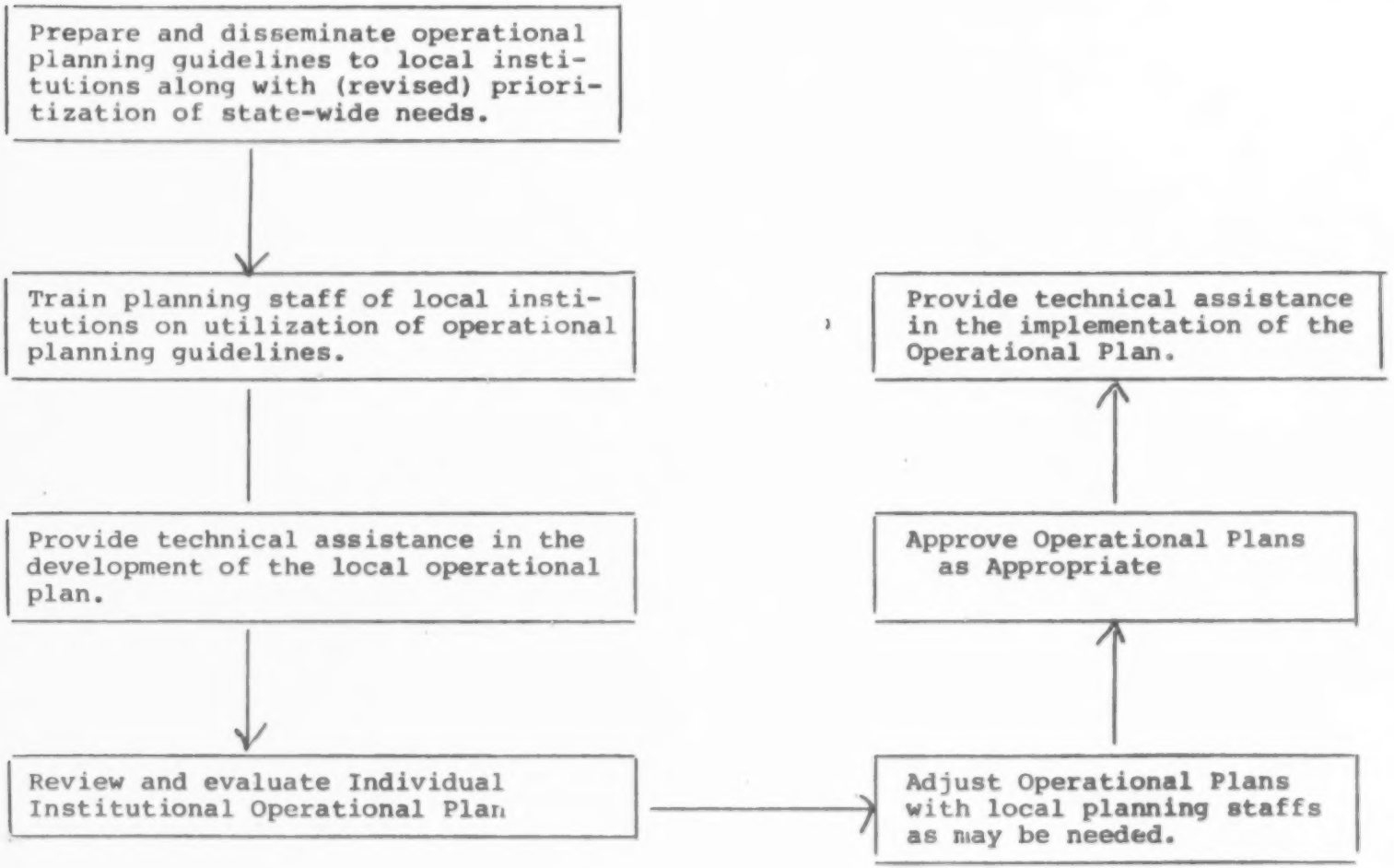
STRATEGIC PLANNING PROCESS -- STATE LEVEL


Identify state-wide employment demands and projections for post-secondary programs and services.
Compare identified statewide demand to actual output and available supply.
Determine prioritization of programs on a statewide basis that should be added, modified or closed.
Prepare & disseminate strategic planning guidelines to local institutions along with prioritization of state-wide needs.
Train planning staffs of local institutions on utilization of strategic planning guidelines
Provide technical assistance to local institutions in the development of strategic plans
Consolidate, Review, & Evaluate Individual Institutional Strategic Plans
Adjust Strategic Plans with Local Institutions as Needed and as may be found appropri.
Develop budget based on consolidation of institutionals' strategic plans
Submit budget for strategic plan through OPB and budgeting process to General Assembly
Based on budget appropriations, provide technical assistance to local schools in developing operational plans

STRATEGIC PLANNING PROCESS -- LOCAL LEVEL

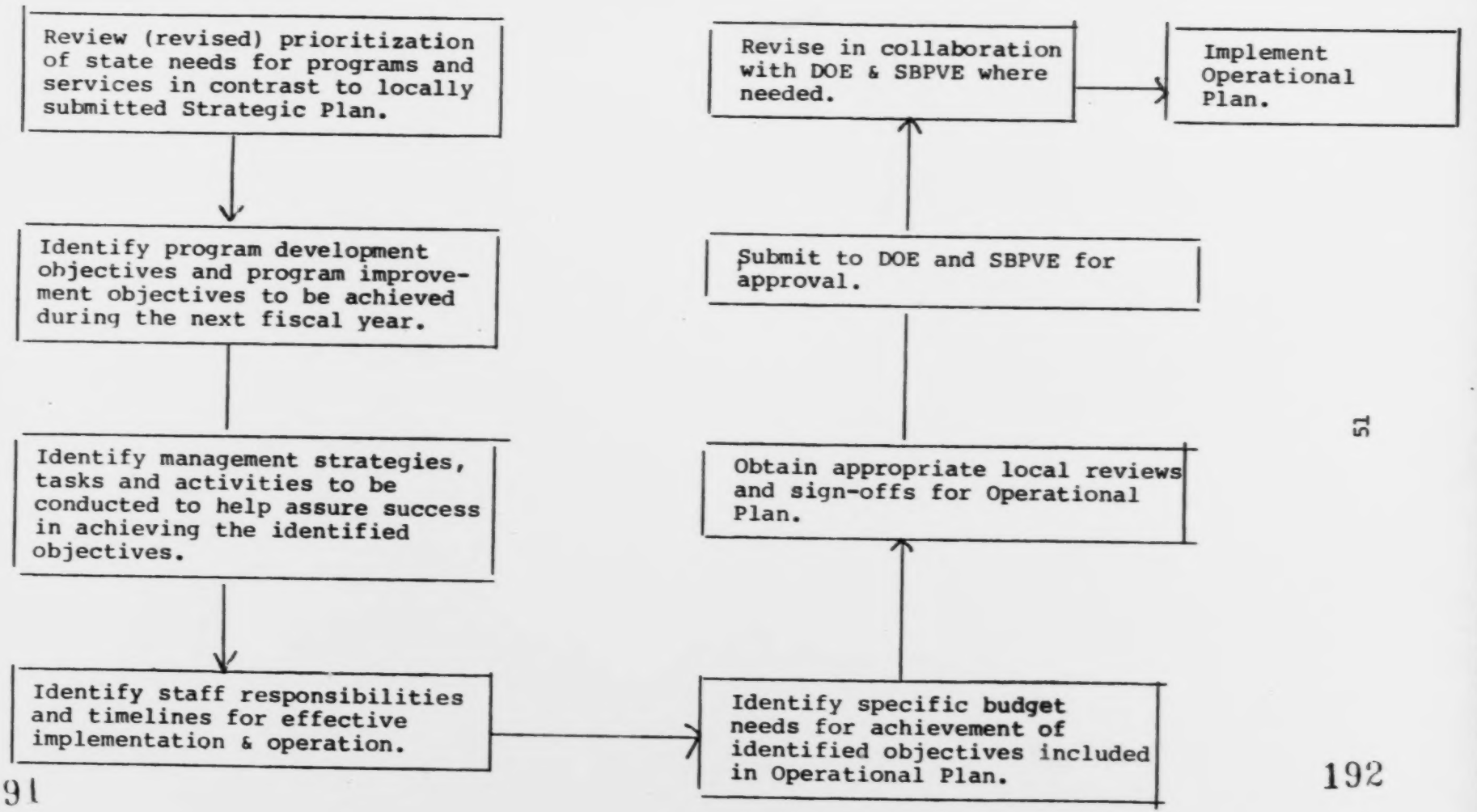

Review prioritization of state-wide needs for programs & services.
Identify & document unique unmet employment needs of service area. (Demand - Supply = Unmet Needs
Conduct critical analysis of current programs & services to determine effectiveness & improvements needed.
Identify long range program goals and objectives for the initiation, modification or closure of programs & services.
Develop in collaboration with appropriate local agencies/ groups/committees the institutional Strategic Plan including prioritization of long range goals, objectives & strategies for accomp.
Develop budget request for personnel, facilities, equipment, travel, staff development, and M&O needed to effectively implement Strategic Plan.
Obtain appropriate local review and sign-offs of Strategic Plan
Submit to DOE and SBPVE for approval.
Adjust Strategic Plan as needed in collaboration with DOE and SBPVE.

OPERATIONAL PLANNING PROCESS -- STATE LEVEL


Prepare and disseminate operational planning guidelines to local institutions along with (revised) prioritization of state-wide needs.
Train planning staff of local institutions on utilization of operational planning guidelines.
Provide technical assistance in the development of the local operational plan.
Review and evaluate Individual Institutional Operational Plan
Adjust Operational Plans with local planning staffs as may be needed.
Approve Operational Plans as Appropriate
Provide technical assistance in the implementation of the Operational Plan.

50

OPERATIONAL PLANNING PROCESS -- LOCAL LEVEL


Review (revised) prioritization of state needs for programs and services in contrast to locally submitted Strategic Plan.
Identify program development objectives and program improvement objectives to be achieved during the next fiscal year.
Identify management strategies, tasks and activities to be conducted to help assure success in achieving the identified objectives.
Identify staff responsibilities and timelines for effective implementation & operation.
Identify specific budget needs for achievement of identified objectives included in Operational Plan.
Obtain appropriate local reviews and sign-offs for Operational Plan.
Submit to DOE and SBPVE for approval.
Revise in collaboration with DOE & SBPVE where needed.
Implement Operational Plan.

APPENDIX B

CRITERIA & DATA SOURCES FOR ASSESSING PROGRAM EFFECTIVENESS

CRITERIA AND DATA SOURCES FOR ASSESSING PROGRAM EFFECTIVENESS

CRITERION	DATA SOURCE(S)
Average quarterly enrollment per instructor, last 3 years.	MIS
Trend in quarterly enrollment per instructor for last 3 yrs.	MIS
Average completion rate per instructor for last 3 years.	MIS
Average placement rate in field or related field for which trained per instructor for last 3 years.	MIS
Employer satisfaction with quality of graduates' work.	MIS, FOLLOWUP REPORT
›b satisfaction of graduates.	MIS, FOLLOWUP REPORT
Average starting wage of graduates.	MIS, FOLLOWUP REPORT
Average wage of graduate six months after employment.	Local effort
Average cost per enrollee for last 3 years.	MIS
Average cost per placement, last 3 years	MIS and local effort
Average percentage of completers passing state licensing exam for last 3 years.	Local effort with state licensing boards
Average percentage of completers demonstrating acceptable competency ›vels as measured by standard .oficiency measures.	Local instructors

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CRITERION	DATA SOURCES
Average time taken by graduates to complete total program.	Local enrollment records/ instructor records
Average percentage of program completed by typical enrollee.	Local instructor records
Average percentage of grads over past 3 years who would enroll in the program again.	MIS, FOLLOWUP REPORT
Extent to which legal requirements were met.	Local effort
Average number of unemployed graduates looking for work.	MIS, Followup report
Teacher qualification	Local records
Extent to which individual program advisory committee was utilized.	Local records
Capacity and condition of facility.	Local review
Appropriateness and condition of equipment.	Local review, MIS followup report
Participation and support of business/ industry representatives in program planning, operation, evaluation.	Local records
Availability and quality of guidance/ counseling/diagnostic services provided to program enrollees.	Local review
Availability and effectiveness of placement service to program enrollees and graduates.	Local review
Availability and utilization of current training materials in program.	Local review

APPENDIX C

CRITERIA & DATA SOURCES FOR JUSTIFYING NEW PROGRAMS

CRITERIA AND DATA SOURCES FOR JUSTIFYING NEW PROGRAMS

CRITERION	DATA SOURCES
State-wide employment demand	State Plan, Dept. of Labor
Regional employment demand	ACE Study
Trends in employment demand as evidenced over last 3 years	Dept. of Labor
Typical working conditions	Craft advisory committees Local assessment
Average starting wage of trained employee	Dept. of Labor, Professional Associations, Local Assessment Craft advisory committees
Average wage of employee six months after employment.	Craft advisory committees Local assessment
Estimated payback time	MIS data and local assessment
Estimated start-up costs	DOE
Estimated operating costs	DOE
Estimated cost per enrollee	DOE
Estimated cost per placement	DOE
Typical restrictions on hiring in given occupational field.	Trade associations, local craft committees, local assessment
Occupational turnover in field	Trade associations, local craft committees, local assessment
General image of occupational area.	Local assessment

CRITERION	DATA SOURCES
Estimated training time required to develop required proficiency levels.	Trade associations, other programs in state, DOE
Occupational field found within top quartile of unmet need in state.	State Plan
High tech employment indicator	ACE Study
Job availability within 30 mile radius of school	Local assessment
Average placement rate in current programs throughout state.	DOE, MIS
Average quarterly enrollment in current programs throughout state.	DOE, MIS
Availability of facilities with minimum renovation.	Local assessment
Availability of qualified staff	Local assessment
Evidenced local business/industry support for program.	Local assessment
Potential for cooperative program design	Local assessment, DOE
Availability of ancillary/ support services for program	Local assessment
Estimated student appeal for enrollment	

CRITERION	DATA SOURCES
Accessibility to minorities, women, handicapped	DOE, local assessment
Potential for meeting legal requirements/restrictions	Licensing boards, agencies DOE, local assessment
Availability of appropriate instructional materials	DOE, commercial publishers, Business and industry
Recommended for school in 1984 ACE Study	ACE Study
OTHER	
OTHER	
OTHER	
OTHER	
OTHER	
OTHER	
OTHER	

APPENDIX D

ORIENTATION MEETING, TEAM MEMBERS

POST SECONDARY VOCATIONAL EDUCATION
EVALUATING--PLANNING--BUDGETING

January 15, 1985

Welcome

Introductions

Overview of Project Objectives

An Assessment of Past Evaluation and Planning Performance

Major Strengths and Weaknesses: State Level
Major Strengths and Weaknesses: Local Level

Designing a Model and a Process for Effective Decision-Making

Program Assessment:

- Identification of Criteria
- Identification of Data Sources
- Identification of Standards for Acceptability
- Review of Process
- Proposed Timelines

Development of Justification for New Program Requests:

- Identification of Criteria
- Identification of Data Sources
- Establishment of Priorities
- Review of Process
- Proposed Timelines

Relationship to Other Projects

Summary Comments from DOE and Postsecondary Board Staffs

Summary Comments from Project Director

Adjourn

ALTERNATIVE APPROACHES TO ESTABLISHING PRIORITIES

Essential Characteristic Method

PROGRAM	UNMET NEED	WAGES	START-UP COSTS	TURNOVER	WINNER
Computer Repair	+	+	+	+	+
Robotics	+	-	+	-	
Computer Proces.	-	+	-	+	

1. Identify criteria
2. Determine criticality of each criterion
3. Identify alternative programs considered
4. Determine "winner(s)"

Weighted Factor Index Method

PROGRAM	UNMET NEED (5)		START COSTS (4)		WAGES (3)		TOTAL
Auto Mechanics	1	5	2	8	2	6	19
Data Processing	2	10	1	4	3	9	23
Robotics	1	5	3	12	2	6	24

1. Identify criteria
2. Assign weight to each
3. Identify alternative programs considered
4. Calculate weight for each criterion per program
5. Total weight for each program
6. Identify priority based on weight

PLANNING/EVALUATION/BUDGETING SYSTEM
PROCESS BY

CTIVITY	NEEDS IDENTIFIED	NEEDS ANALYSIS	OUTCOMES DECISION(S)	DEVELOP IMPROVEMENT PLAN	SUBMIT PLAN FOR APPROVAL	DEVELOP IMPROVEMENT BUDGET	SUBMIT IMPROVEMENT BUDGET FOR APPROVAL
LOCAL LEVEL	IDENTIFY NEEDS OF SERVICE AREA USE LOCAL ADVISORY COMMITTEES; APDC DATA; LABOR DEMANDS DATA; ASSESSMENT PROJECT DATA; LOCAL SURVEYS; TRADE, TECHNICAL, & PROFESSIONAL ASSOCIATIONS; LEADERSHIP FORUMS; LOCAL DEVELOPERS, ETC.	COMPARE IDENTIFIED NEEDS TO ACTUAL OUTPUT. USE IDENTIFIED NEEDS DATA, ENROLLMENTS, COMPLETIONS, PLACEMENTS, STUDENT AND EMPLOYER FOLLOW-UP, JTPA, PRIVATE SCHOOLS.	DETERMINE CHANGES THAT SHOULD BE MADE IN TERMS OF (A) NEW PROGRAMS, (B) PROGRAMS NEEDING MODIFICATION, AND (C) PROGRAMS TO BE DISCONTINUED. USE NEEDS ANALYSIS AS MAJOR RESOURCE; LOCAL AND STATE EVALUATIONS, SACS EVALUATIONS, MIS DATA, LICENSURE RATES; STUDENT INTEREST.	DEVELOP IMPROVEMENT PLAN WHICH ADDRESSES CHANGES, PRIORITIES, FACILITIES, PERSONNEL, COSTS (WHERE APPROPRIATE). USE OUTCOME DECISION DATA, LOCAL AND STATE EVALUATION RESULTS. (BECOMES SECTION OF LOCAL PLAN).	OBTAIN STATE APPROVAL OF IMPROVEMENT PLAN. PLAN TO BE SUBMITTED TO DOE. DEVELOP AND PRIORITIZE OBJECTIVES. INCLUDE 2-YEARS IN PLAN; STATE WILL CONSIDER FIRST YEAR FOR BUDGET PURPOSES. COORDINATE WITH SBPVE.	DEVELOP IMPROVEMENT BUDGET BASED ON APPROVED PLAN. NOTE: IMPROVEMENT BUDGET REQUIRED ONLY IF APPROVED PLAN INCLUDES NEED FOR NEW STATE FUNDS.	SUBMIT IMPROVEMENT BUDGET REQUEST TO DOE. SUBMIT BUDGET FOR APPROVAL BY DOE STAFF. DOE STAFF COORDINATES RECOMMENDATIONS WITH SBPVE STAFF FOR REVIEW AND RECOMMENDATIONS.
TIMELINE	AUGUST 15	SEPTEMBER 15	NOVEMBER 15	JANUARY 15	FEBRUARY 15	APRIL 15	MAY 15
	← YEAR 1 →						
STATE LEVEL	IDENTIFY STATEWIDE NEEDS FOR POSTSECONDARY VOCATIONAL EDUCATION. USE ASSESSMENT PROJECT DATA; STATEWIDE LABOR SUPPLY-DEMAND; MIS DATA; AGENCY COUNCIL, ADVISORY COUNCIL RECOMMENDATIONS; STATE SURVEYS; TRADE ASSOCIATIONS, BUSINESS & INDUSTRY COUNCIL; INDUSTRY & TRADE; OTHERS.	COMPARE IDENTIFIED STATEWIDE NEEDS TO ACTUAL OUTPUT OF POSTSECONDARY VOCATIONAL PROGRAMS. USE IDENTIFIED NEEDS DATA; MIS AND OTHER DATA TO DETERMINE VOIDS OR OVERPRODUCTION.	DETERMINE PROGRAMS ON A STATEWIDE BASIS THAT SHOULD BE (A) ADDED, (B) MODIFIED, OR (C) CLOSED. DEVELOP PRIORITY BY PROGRAM AND GEOGRAPHICAL AREA. USE NEEDS ANALYSIS DATA, LOCAL OUTCOME DECISION DATA, AND STATE EVALUATION RESULTS.	DEVELOP STATEWIDE PLAN WHICH INDICATES PROGRAM CHANGES, PRIORITIES, APPROACHES; FACILITY ADDITION, MODIFICATION OF PERSONNEL, EQUIPMENT, ETC. USE INPUT FROM STATE OUTCOME DECISION AND LOCAL IMPROVEMENT PLANS (TO CONSTITUTE MAJOR SECTION OF STATE PLAN).	PLAN SUBMITTED TO SBPVE AND AS COMPONENT OF STATE PLAN FOR VOCATIONAL EDUCATION (FEDERAL REQUIREMENT) TO STATE BOARD OF EDUCATION. (BECOMES MAJOR PLAN OF ACTION FOR SBPVE).	IMPROVEMENT BUDGET REQUEST JOINTLY DEVELOPED BY DOE AND SBPVE STAFF BASED ON COMPILATION OF LOCAL APPROVED PLANS WHICH ARE BASED UPON STATEWIDE PLAN.	SUBMIT IMPROVEMENT BUDGET REQUEST THROUGH OPB AND BUDGETING PROCESS TO GENERAL ASSEMBLY.

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APPENDIX E

PRELIMINARY DEFINITIONS & STANDARDS

CRITICAL CRITERIA AND DEFINITIONS

Total Enrollment By Taxonomy for Past 3 Years:

Includes total enrollment by taxonomy of full-time and part-time students attending the regular day program, taught by full-time instructional staff members.

Source: Local School Attendance reports for the sixth school day of each quarter.

Assessment Period: Spring quarter, 1982 including summer quarters through Winter quarter, 1985

Total Completion by Taxonomy for Past 3 Years:

Includes the total number of graduates plus the total number of enrollees completing more than 50% of the program by taxonomy.

Source: MIS Fall Followup Report

Assessment Period: October followup reports from 1982, 1983, 1984

Total Placement by Taxonomy for Past 3 Years:

Includes the total number of positive placements by taxonomy. This is identified to include number employed in field, number employed in related field, number continuing their education, and number entering the military.

Source: MIS data

Assessment Period: October followup reports from 1982, 1983, 1984

TOTAL ENROLLMENT BY TAXONOMY

PROGRAM TITLE & TAXONOMY #	Spr '82	Sum '82	Fall '82	Wtr '83	Spr '83	Sum '83	Fall '83	Wtr '84	Spr '84	Sum '84	Fall '84	Wtr '85
												65
2 7												208

TOTAL COMPLETION BY TAXONOMY

PROGRAM TITLE & TAXONOMY NUMBER	FALL 1982	FALL 1983	FALL 1984

TOTAL PLACEMENT BY TAXONOMY

PROGRAM TITLE & TAXONOMY #	FALL 1982		FALL 1983		FALL 1984	
	#	% POS.	#	% POS.	#	% POS.

211

212

SUMMARY OF CRITICAL DATA ELEMENTS

PROGRAM TITLE & TAXONOMY #	TREND IN TOTAL ENROLLMENT	AVERAGE COMPLETION % TO ENROLLMENT, 3 YRS.	AVERAGE PERCENTAGE OF POSITIVE PLACEMENT, 3 YRS.

SUGGESTED PROCEDURES FOR SECOND LEVEL ASSESSMENTS

1. Assessment of Facilities

This form should be completed by members of the individual program's craft advisory committee. The committee should consist of no fewer than six persons representing a cross-section of businesses and positions within the occupational area for which training is provided. Each member of the advisory committee should make an independent assessment of the program's facilities and complete an evaluation form representing his/her response to the criteria. The process should be conducted by the instructional staff together with the instructional coordinator.

Proposed Standard: At least 2/3 of the advisory committee must complete an assessment form. The composite assessments should reflect:
Category A = 13+ items checked "yes"
Category B = 11-12 items checked "yes"
Category C = less than 11 items checked "yes"

2. Assessment of Equipment

This form should be completed by members of the individual program's craft advisory committee. The committee should consist of no fewer than six persons represeting a cross-section of businesses and positions within the occupational area for which training is provided. Each member of the advisory committee should make an independent assessment of the program's equipment and complete an evaluation form representing his/her response to the criteria. The process should be conducted by the instructional staff together with the instructional coordinator.

Proposed Standard: At least 2/3 of the advisory committee must complete an assessment form. The composite assessments should reflect:
Category A = 9+ items checked "yes"
Category B = 7-8 items checked "yes"
Category C = less then 7 items checked "yes"

3. Assessment of Instructional Materials

This form should be completed by members of the individual program's craft advisory committee. The committee should consist of no fewer than six persons representing a cross-section of businsses and positions within the occupational area for which training is provided. Each member of the advisory committee should make an independent assessment of the program's equipment and complete an evaluation form representing his/her response to the criteria. The process should be conducted by the instructional staff together with the instructional coordinator.

Proposed Standard: At least 2/3 of the advisory committee must complete an assessment form. The composite assessments should reflect:

Category A = 9+ items checked "yes"
Category B = 7-8 items checked "yes"
Category C = less than 7 items checked "yes"

4. Assessment of Business Support and Participation

This form should be completed by the instructional coordinator. He/she should seek at least evidence of at least three instances wherein each criteria is reflected positively. This should be approached as a collaborative activity with the instructional staff.

Proposed Standard: Category A = Evidence of 3 instances cited for each of 15+ items
Category B = Evidence of 3 instances cited for each of 12-14 items
Category C = Evidence of 3 instances cited for each of less than 12 items

EMPLOYER EVALUATION OF STUDENTS

Data available from MIS:

Technical Knowledge Rating
Work Attitude Rating
Work Quality Rating
Overall Rating

Concerns/Needs

System needs to be modified so that evaluation instrument is only sent to those employers of students who have been identified by the school as being completers or who have completed 50%+ of the program.

STUDENT EVALUATION OF PROGRAM

Data available from MIS:

How well did your training prepare you for your job?
Was the instructional content up-to-date?
Were instructional tools and equipment similar to those used on your job?
Was instruction well presented in the lab?
Was instruction well organized?
Would you recommend this school to others for occupational training
Hourly and monthly salary of program leavers with less than 50%, program leavers with more than 50%, and program completers.

Concerns/Needs

Data on first five items identified above should be provided by category of completion: less than 50%, more than 50%, program completer

TEACHER QUALIFICATION

Data available locally:

Annual performance appraisal reports
Student evaluations
Initial employment terms/conditions/qualifications/certification

SUMMARY OF PROPOSED CATEGORIAL STANDARDS

CRITERION	CATEGORY A	CATEGORY B	CATEGORY C
CRITICAL CRITERIA			
TREND IN ENROLLMENT, 3 YRS.	Increase	Stable	Decline
AVERAGE COMPLETION RATE COMPARED TO ENROLLMENT, 3 YEARS	80%+	70-79%	Less than 70%
AVERAGE PERCENTAGE OF POSITIVE PLACEMENT, 3 YEARS	90%+	70-79%	Less than 70%
SECOND ASSESSMENT			
ASSESSMENT OF FACILITIES	13+ Yes	11-12 Yes	Less than 11
ASSESSMENT OF EQUIPMENT	9+ Yes	7-8 Yes	Less than 7
ASSESSMENT OF INSTRUCTIONAL MATERIALS	9+ Yes	7-8 Yes	Less than 7
ASSESSMENT OF BUSINESS SUPPORT	15+ items	12-14 items	Less than 12
OVERALL EMPLOYER RATING, 3 YEARS	4.5+	4.0-4.4	Less than 4.0
MEAN STUDENT RATING, 3 YEARS	90%+	80-89%	Less than 80%

SUMMARY ASSESSMENT

PROGRAM	CRITERIA						DECISION		
	****	****	****	****	****	****	MAINTAIN	PHASE-OUT	MODIFY

73

219

220

PROPOSED WEIGHTED INDEX

CRITERIA IDENTIFIED	PROPOSED WEIGHT
Trends in demand	6
Unmet need within 50 mile radius of school	9
Statewide demand as evidenced in AEC Study, State Plan, other	6
Estimated startup cost (Inverse ratio)	3
Estimated operating cost (Inverse ratio)	3
Estimated cost per placement (Inverse ratio)	3

PROGRAM RATING	STATE-WIDE DEMAND (6)		TRENDS (6)		UNMET NEED (9)		STARTUP COST (3)		OPERATING COST (3)		COST PER PLAC. (3)		TOTAL WEIGHT
High	3	18	3	18	3	27	3	9	3	9	3	9	90
Medium	2	12	2	12	2	18	2	6	2	6	2	6	60
Low	1	6	1	6	1	9	1	3	1	3	1	3	30

APPENDIX F

DEFINITIONS & PROCEDURES USED IN FIELD-TEST

CRITERIA AND DEFINITIONS

Total Enrollment by Taxonomy for Past 3 Years -- NO CHANGE

Includes total enrollment by taxonomy of full-time and part-time students attending the regular day program, taught by full-time instructional staff members.

Source: Local School Attendance reports for the sixth school day of each quarter.

Assessment Period: Spring quarter, 1982 including summer quarters through Winter quarter, 1985.

Format: NO CHANGE IN FORMAT FOR DATA DISPLAY

**Total Completion by Taxonomy for Past 3 Years -- SEE CHANGE

Includes the total number of graduates, the total number of enrollees completing administrative requirements, the total number of enrollees completing more than 50% of the program, and the total number of enrollees completing less than 50% of the program who are available for employment by taxonomy.

Source: MIS Fall Followup Reports

Assessment Period: October followup reports from 1982, 1983, 1984

Format: NO CHANGE IN FORMAT FOR DATA DISPLAY

Total Placement by Taxonomy for Past 3 Years: -- NO CHANGE

Includes the total number of positive placements by taxonomy. This is identified to include number employed in field, number employed in related field, number continuing their education, and number entering the military.

Source: MIS data

Assessment Period: October followup reports from 1982, 1983, 1984

Format: NO CHANGE IN FORMAT FOR DATA DISPLAY

SUMMARY OF CRITICAL DATA ELEMENTS -- FORMULAE AND DATA DISPLAY

Column #1 -- Program Title & Taxonomy Number, NO CHANGE

Column #2 -- Trend in Total Enrollment

Formula:
1. Add total enrollment for Spring Quarter, 1982, Summer, 1982, Fall, 1982, Winter 83.
2. Compute average total enrollment for four quarter period.
3. Compute average total enrollment for corresponding four-quarter periods of Spring, 1983--Winter, 1984 and Spring, 1984--Winter, 1985.
4. Calculate change in average total enrollment from first average to third year average and display by number and percentage.

Column #3 -- Average Completion % To Enrollment, 3 Years

Formula:
1. Refer to form, Total Completion by Taxonomy to identify total number of completions for the years 1982, 1983, 1984. Compute the average number of completions for the three year period.
2. Refer to the form, Total Enrollment by Taxonomy. Compute the average enrollment for the four-quarter periods, Spring 1982--Winter 1983, Spring 1983--Winter 1984, and Spring 1984--Winter 1985.
3. Calculate the percentage of average completion to average enrollment for the three year period.

Column #4 -- Average Percentage of Positive Placement, 3 Years

Formula:
1. Refer to form, Total Placement by Taxonomy to identify % of positive placement for each year, 1982, 83, 84.
2. Calculate the average percentage of positive placement for the three-year period.

DATA DISPLAY: REFER TO REVISED FORMAT ENCLOSED

SUMMARY OF CRITICAL DATA ELEMENTS

PROGRAM TITLE & TAXONOMY #	TREND IN TOTAL ENROLLMENT		AVERAGE COMPLETION % TO AVERAGE ENROLLMENT 3 YEARS	AVERAGE PERCENTAGE OF POSITIVE PLACEMENT, 3 YEARS
	# CHGE	% CHGE		

EMPLOYER EVALUATION OF STUDENTS

Refer to revised format enclosed. Complete for programs which fall into Category C on <u>two</u> or more of the critical criteria.

STUDENT EVALUATION

Refer to revised format enclosed. Complete for programs which fall into Category C on <u>two</u> or more of the critical criteria.

ASSESSMENT OF FACILITIES

ASSESSMENT OF EQUIPMENT

ASSESSMENT OF INSTRUCTIONAL MATERIALS

ASSESSMENT OF BUSINESS SUPPORT AND PARTICIPATION

Forms distributed in Macon are to be reviewed and critiqued by appropriate members of your staff together with input from advisory committees were possible. <u>If generally satisfied with format, items and suggested procedures, please use to assess those programs which fall into Category C on two or more of the critical criteria</u>.

SUMMARY ASSESSMENT

Refer to revised format enclosed. Please complete form using suggested standards for program categorization distributed at the Macon meeting.

EMPLOYER EVALUATION OF STUDENTS

PROGRAM TITLE & TAXONOMY #	TECHNICAL KNOWLEDGE	WORK ATTITUDE	WORK QUALITY	OVERALL RATING	RELATIVE PREPARA.	MEAN RATING ALL ITEMS	CATEGORY
							80

Directions: Use MIS Follow-up Report, Fall 1984 for data. Calculate average of five items to determine "mean rating, all items". Identify category of program effectiveness using the following standards for the last column: CATEGORY A = 4.5+; CATEGORY B = 4.0-4.4 CATEGORY C = Less than 4.0.

STUDENT EVALUATION

PROGRAM TITLE & TAX. #	JOB PREP.	INSTRUC. CONTENT	TOOLS & EQUIP.	PRES. IN-CLA.	PRES. IN-LAB	ORG. INST.	GRAD/ TEST	INST. INT.	CLASS SIZE	MEAN RATING
										81
231										232

DIRECTIONS: Use MIS Follow-up Report, Fall 1984 for data. Calculate average of nine items to determine "mean rating" in last column. Enter percentage and category of program effectiveness using the following standards for the last column: CATEGORY A = 90%+, CATEGORY B = 80-89%, CATEGORY C = less than 80%.

SUMMARY ASSESSMENT, ALL ITEMS

Directions: Using the standards provided, enter the categorical rating of each program in each column. In column #4, enter the summary rating using the following standard: Score of A on all 3 = Category A; Score of B on two or more = Category B; Score of C on two or more = Category C. On secondary assessment, Columns 5-10, please complete for all Category C programs; optional completion on Category B programs.

PROGRAM TITLE & TAX. #	CRITICAL CRITERIA				SECONDARY ASSESSMENT					
	ENROL TREND #1	AV. COMP. TO AV ENR. #2	AV. % POS. ENR. #3	SUMMARY CATEGORY #4	EMP. EVAL. #5	STUD. EVAL. #6	FACILI-TIES #7	EQUIP-MENT #8	INSTRUC. MATER. #9	BUS. SUP. & PARTIC. #10

SUMMARY OF PROPOSED CATEGORIAL STANDARDS

CRITERION	CATEGORY A	CATEGORY B	CATEGORY C
CRITICAL CRITERIA			
TREND IN ENROLLMENT, 3 YRS.	Increase	Stable (5-10% Chge)	Decline
AVERAGE COMPLETION RATE COMPARED TO ENROLLMENT, 3 YEARS	80%+	70-79%	Less than 70%
AVERAGE PERCENTAGE OF POSITIVE PLACEMENT, 3 YEARS	90%+	70-79%	Less than 70%
SECOND ASSESSMENT			
ASSESSMENT OF FACILITIES	13+ Yes	11-12 Yes	Less than 11
ASSESSMENT OF EQUIPMENT	9+ Yes	7-8 Yes	Less than 7
ASSESSMENT OF INSTRUCTIONAL MATERIALS	9+ Yes	7-8 Yes	Less than 7
ASSESSMENT OF BUSINESS SUPPORT	15+ items	12-14 items	Less than 12
OVERALL EMPLOYER RATING, 3 YEARS	4.5+	4.0-4.4	Less than 4.0
MEAN STUDENT RATING, 3 YEARS	90%+	80-89%	Less than 80%

83

FOLLOW-UP PLANS FOR PROGRAM MODIFICATION

PROGRAM: _____

MAJOR DEFICIENCY AS NOTED FROM ASSESSMENT CRITERIA: _____

IDENTIFIED CAUSE(S) FOR DEFICIENCY _____

_____

FOLLOW-UP ACTION TO BE TAKEN:

Activity	Timelines	Person Responsible

BUDGET REQUIREMENTS, IF ANY, OVER-AND-ABOVE REGULAR FUNDING:

Category	Amount	Justification
Salary		
Travel		
Staff Development		
Equipment		
Supplies/Materials		
Other (Specify)		
TOTAL		

APPENDIX G

DEFINITIONS & PROCEDURES FOR LOCAL SURVEYS

CRITICAL CRITERIA: NEW AND EXPANDED PROGRAM REQUESTS

CRITERION	SOURCE
EMPLOYMENT DEMAND IN SERVICE AREA	Survey conducted by school staff; data sought will be by major occupations within field of employment and will include business estimates for new/additional workers and workers needed for replacement due to separations. Standard form to be used.
TRENDS IN EMPLOYMENT DEMAND AS EVIDENCED OVER LAST 3 YEARS.	ADPC for service area of school.
UNMET NEED IN SERVICE AREA	Difference between employment demand evidenced in #1 above and estimated supply from all postsecondary institutions in service area including junior colleges and private schools. Estimated supply data to be collected and documented by local schools. Standard form to be used.
ESTIMATED START-UP COSTS	State-wide averages of start-up cost by program taxonomy to be determined by DOE from actual cost data for those programs currently in operation throughout the state. For new programs not previously offered in Georgia, start-up costs to be determined cooperatively between DOE staff and local school staff.
ESTIMATED COST PER PLACEMENT	State-wide averages of cost per placement by program taxonomy to be determined by DOE from actual cost data for those programs currently in operation throughout the state. For new programs not previously offered in Georgia, cost per placement will be estimated using estimated start-up costs, estimated average enrollment, and estimated length of program.

CRITERION	SOURCE
JOB AVAILABILITY WITHIN 50 MILES OF SCHOOL	Survey conducted by school staff. See "Employment Demand in Service Area" for description of focus.
ESTIMATED OPERATING COSTS	State-wide averages of operating costs by program taxonomy to be determined by DOE from actual cost data from those programs currently in operation throughout the state. For new programs not previously offered in Georgia, operating costs will be estimated cooperatively between DOE staff and local school staff.
EVIDENCED LOCAL BUSINESS/ INDUSTRY SUPPORT FOR PROGRAM	Items to address this criterion will be included in survey instrument to be used for "Employment Demand in Service Area".

EMPLOYMENT DEMAND SURVEY: SUGGESTED PROCEDURES

1. Organize a steering committee to include both instructional staff from area to be surveyed as well as supervisory staff.

2. Identify specific occupations for which data are to be collected. Enter those occupational titles in the first column on page 2.

3. Identify the major businesses in the area which hire persons in those occupations. If the service area is too large to cover in its entirety, identify a stratified sample to be taken of the following:

geographical area	single establishments
large firms	chains
small firms	unionized firms
private firms	nonunionized firms
public firms	

4. From the above analysis, identify the specific company name, address, appropriate contact person by name and title, and telephone.

5. Determine method(s) to be used to conduct survey, i.e. personal interviews or mail questionnaire or combination thereof.

6. Based on decision in #5, organize steering committee accordingly with specific assignments and timelines.

7. IF MAIL QUESTIONNAIRE:

   a. Call contact person prior to mailing to alert him/her of survey and to solicit their cooperation.
   b. Develop cover letter stating rationale for survey and benefits which they can subsequently accrue.
   c. Duplicate survey instrument on yellow paper.
   d. Enclose a self-addressed, stamped envelope.
   e. Place a commemorative stamp on the outside envelope.
   f. Code survey instruments so as to identify respondents and non-respondents.
   g. Mail survey on Monday.
   h. Followup non-respondents with telephone call and second mailing after ten day period.
   i. Followup non-respondents with telephone call interview after second ten-day period.

8. IF INTERVIEW:

   a. Call contact person prior to interview to explain reason of survey and to solicit their cooperation as well as to set appointment time for interview.
   b. TRAIN INTERVIEWERS including the following:
      standard introduction to include rationale for survey and benefits which they can subsequently accrue
      total familiarity with form and data items called for
      suggested responses for typical questions

8. IF INTERVIEWS -- continued

Train the Interviewers:

role-play interview
courtesies in notetaking and interviewing
proper dress
image of school
proper closings and expressions of appreciation

9. WHETHER INTERVIEWING OR MAIL SURVEYS, ARRANGE WITH LOCAL COMPUTER SPECIALIST ON YOUR STAFF TO WRITE PROGRAM WHEREIN ALL DATA CAN BE ENTERED AND TABULATED WITH A MINIMUM OF DIFFICULTY.

10. Upon completion of the survey, synthesize the data on the "Unmet Need Projections" form.

11. Collect the estimated supply data from the public and private postsecondary schools in your service area. BE HONEST!

12. Enter the supply data on the "Unmet Need Projections" form and calculate "unmet need" in the final column for each occupation included in the survey.

EMPLOYMENT DEMAND SURVEY

COMPANY _____ DATE _____

ADDRESS _____

CITY, STATE, ZIP _____

TELEPHONE(s) _____

CONTACT PERSON _____ TITLE _____

For the items given below, simply check the response which best represents your opinion or specify your "other" response where appropriate. On the second page, please furnish your demand estimates for the occupations identified. Thank you for your assistance.

1. Does your company currently provide in-house training for your employees?

___ Yes ___ No

2. If YES, identify the type(s) of training provided. Check as many as are applicable.

___ OJT
___ Apprenticeship
___ Formal classes
___ Pay tuition for employee to attend designated classes
___ Contract with outside agencies/persons for designated training
___ Other, Specify _____

3. Major source of recruitment for the occupations identified on page 2.

___ Area voc-tech schools
___ High schools
___ Private schools
___ Junior colleges
___ Colleges/universities
___ Other companies
___ Other, specify _____

4. Typical level of training required by your company in hiring persons for occupations identified on page 2.

___ High School Diploma
___ Area Voc-Tech School Certificate/Degree
___ Junior College, Associate Degree
___ 4-Year College Degree
___ OJT
___ Apprenticeship
___ Other, specify _____.

5. If a full-time program were offered to prepare persons for the occupation identified on page 2, would you and the management staff of your company support the program in the following ways. Check those applicable.

___ Serve on advisory committee
___ Advise on curriculum materials
___ Serve as guest speaker
___ Provide training materials
___ Provide equipment
___ Provide OJT, internships for students
___ Provide OJT, internships for program instructors
___ Refer other businesses to program
___ Refer employees to program
___ Arrange company tours
___ Evaluate program
___ Publicize program in company
___ Sponsor scholarships
___ Recruit program graduates
___ Other, specify _____

If you could not support this type of program, why not _____

_____

EMPLOYMENT DEMAND SURVEY

OCCUPATIONAL TITLE	# CURRENTLY EMPLOYED	TREND OVER LAST 5 YRS		AVERAGE ANNUAL # NEW JOBS ADDED	AVERAGE ANNUAL # OF REPLACEMENTS HIRED	TOTAL ANNUAL DEMAND: NEW + REPLACEMENTS
		UP	DOWN			

91

245

246

UNMET NEED PROJECTIONS

OCCUPATIONAL TITLE	DEMAND ESTIMATES			SUPPLY ESTIMATES			NET UNMET NEED
	TOTAL NEW ADDITIONS	TOTAL NUMBER REPLACEMENTS	TOTAL DEMAND	COMP. OF VOC PROG.	OTHERS, INC. PRIV. SCHOOLS	TOTAL SUPPLY	
							92
247							248

PROGRAM: _____ PLANNING GUIDE

SPECIFIC OBJECTIVES	RATIONALE	STRATEGIES/ACTIVITIES PLANNED TO ACHIEVE OBJECTIVE	STRATEGY TIMELINES	
			PLANNED DATE OF COMPLE.	ACTUAL COMPLE.

93

249

259

PERSON(S) RESPONSIBLE	FACILITIES, SUPPLIES, EQUIPMENT PERSONNEL NEEDED (SPECIFY)	BUDGET REQUIREMENTS BASED ON PREV. COL.	EVALUATION MEASURES	MANAGEMENT SIGN-OFF

APPENDIX H

COST MODELS

COST-ACCOUNTING MODELS*

One of the greatest problems of the vocational educator is the cost of programs. Those persons responsible for supplying data to legislators, fellow educators and the public are insecure and frustrated by their lack of knowledge of accurate costs of programs. (Gasior, Kocinski, Doty, 1975). This lack of knowledge of accurate costs may be partly due to the fact that there is a significant lack of cost-effective evaluation in the literature. Considerable efforts have been made to evaluate programs of instruction on the basis of academic success, community need, and student popularity; however, little emphasis has been placed on program cost. (Semple & West, 1982)

In reviewing the literature, several models were found that have helped Vocational Administrators determine their program costs. The highlights of these models follow:

A. Cost Analysis Project or "CAP" Model

The purpose of this research project was the design, development, implementation, and testing of a model to examine and evaluate curriculum programs on a cost efficiency basis.

The model recommends a coherent and integrated approach to instructional data management, analysis, and reporting in that:

1. It permits the clustering of curriculum programs into instructional cost centers that are meaningful at the institutional level.
2. It permits the preassignment of student membership hours and faculty salaries to locally instructional cost centers. Thus, it radically reduces the paperwork burden required of the reporting institutions.

*Compiled by Debra Nolan, Graduate Research Assistant

3. It encourages an evaluation of curriculum programs based upon many factors, including the efficeint use of fiscal resources.

. A step-by-step guide to the CAP Evaluation Model follows:

The Preparation Phase:

a. The office of the Dean of Instructional Programs assigns each course to the curriculum program that reflects the instructional intent of that course.

b. These program codes are assigned by Computer Services to each course on the machine readable course master file.

c. The Business Office assigns salary, supplies, and other direct instructional costs to the appropriate cost center.

The Operational Phase:

During each academic term, the following activities take place:

a. The Business Office tracks direct instructional costs for each of the curriculum program cost centers.

b. The Institutional Information System:
   1. Generates machine readable course section lists;
   2. Tabulates membership hours for each course; and
   3. Generates 20% reports and section enrollment data for each course.

The Annual Budget Phase:

Beginning in early March, the budgetary process for the next fiscal year commences, the following activities takes place:

a. Financial information for the previous fiscal year is disseminated by the Business Office to each department chairperson.

b. Course enrollment data from previous terms are provided by Computer Services to the appropriate department chairperson.

c. Based upon enrollment data, projected community needs, and anticipated State and local budgetary constraints, the department chairpersons meet with the dean of curriculum programs to discuss enrollment projections and budgetary needs for the coming year.

d. Preliminary departmental budgets are formulated.

e. Contingent upon final Department of Community College allocations, semifinal departmental budget requests are approved.

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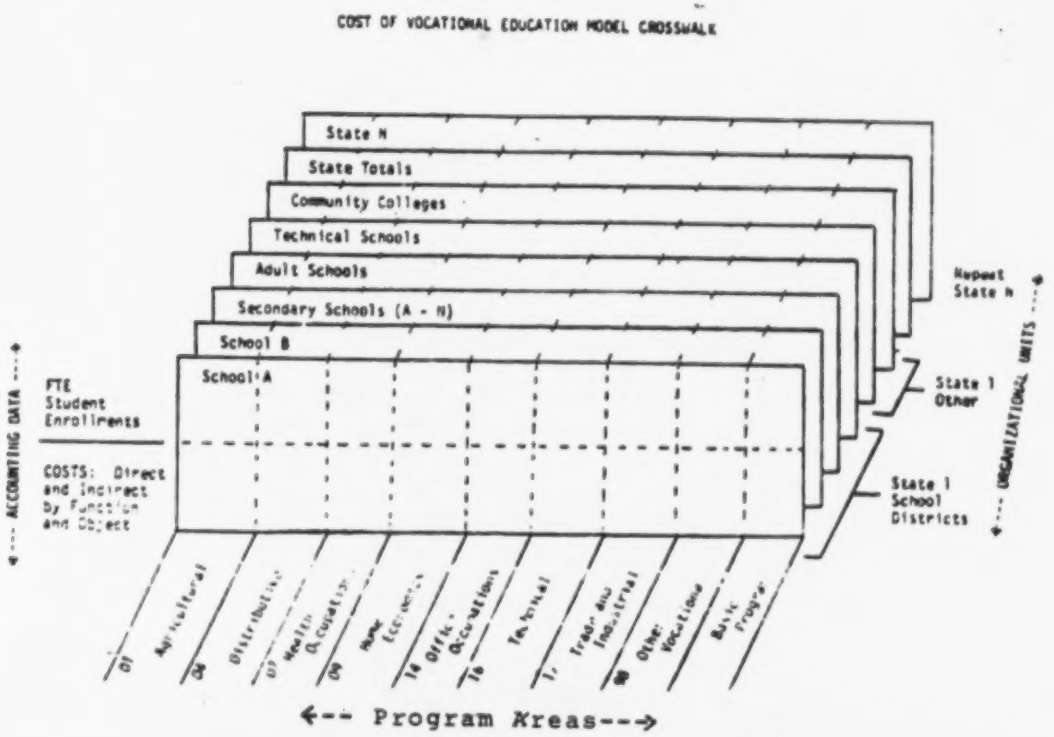
The Evaluation Phase:

After the end of the fiscal year, June 30, the Evaluation Phase begins. First section list data are aggregated by instructional cost centers. Second, data on direct instructional costs are compiled by the Business Office. Third, instructional cost center efficiency ratios are computed in the manner outlined in the CAP Project Manual. Finally, an evaluation of each instructional program cost center is performed by the Office of the Dean of Curriculum Programs. (Semple & West, 1982)

B. The Added-Cost Model

This model is part of a three-volume series that resulted from a study by Hale, Starnes & Mickler (1977), concerning the development and testing of a model for determining the costs of vocational education programs and courses.

The figure below represents a crosswalk of the model design:



Source: The Development and Testing of a Model for Determining the Costs of Vocational Education Programs and Courses (Final Report). Hale, J.A.; Starnes, P.M. & Mickler, W.A. University of Florida, 1977.

The Organizational Units Dimension

This dimension identifies each operating unit that invests resources in support of vocational education programs. The purpose of this dimension of the model is to establish responsibility/cost centers; locations at which program activities occur and therefore resources are demanded. (Postsecondary Institutions, Area Voc-Tech Schools and School Districts).

The Program Dimension

This dimension consists of those course offerings in the various vocational education areas and the "basic" education program. The program areas are described in the appendices of the CAP Manual. Course definitions and coding structures are those recorded in U.S.O.E. Handbook VI.

The Accounting Data Dimension

The accounting data dimension of the model consists of student enrollments and expenditures. Definitions of student accounting are given in the appendices of the CAP Manual along with definitions of the various cost elements.

This three-volume study sought to:

(1) Develop a model for calculating the total costs on a full-time equivalent per student basis for vocational secondary and postsecondary school level courses and programs, and which will permit the analysis of these costs in terms of the basic school program costs; and

(2) to demonstrate the capabilities of the model by using the model to gather and report the vocational program cost data on a number of selected school districts for secondary level offerings and for a number of postsecondary institutions. Also, this task included the reporting of "basic" program costs for school districts and postsecondary institutions. (Hale, Starnes & Mickler, 1977)

C. Model for Cost Per Pupil

Gasior, Kocinski & Doty (1975) developed a model to determine per pupil costs at each of three defined expenditure levels (district, building, and program), were simply a summing of all expenditures at a level and dividing the sum by the number of students enrolled at the level being examined. Enrollment measures used included both average daily enrollment (ADE) and average daily attendance (ADA). Vocational education per pupil costs

at the building level and the program level were determined using the same procedure: sum of expenditures divided by student ADE or ADA. The total per pupil cost identified was simply the sum of the per pupil costs identified at each level. Total program costs were determined by multiplying the total per pupil costs times the ADE or ADA student count in the program being examined. Percentages of total cost by level were also computed. (Gasior, Kocinski & Doty, 1975)

The studies cited indicate that there is little agreement regarding underlying theory upon which to base study methodology and approach. What is obvious is that the factors selected by any institution (as elements contributing to the direct cost of programs) must satisfy its data users.

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Hale, J.A., Starnes, P.M. & Mickler, W.A. The Development and Testing of a Model for Determining the Costs of Vocational Education Programs and Courses (Final Report) Gainesville, Fl.: University of Florida, Institute for Educational Finance, 1977. (ED 155-310)

Semple R.M. & West, D.B. COST ANALYSIS OF CURRICULUM PROGRAMS: A Technical Report. Nash Technical College, Rocky Mount, North Carolina, 1982 (ED 229-612)

APPENDIX I

SUMMARY RESPONSES, TEAM MEMBER CRITIQUE

SUMMARY RESPONSES

Given below is a summary of the responses which you gave to the questions posed at our meeting on March 11. Please indicate your reaction to each of the responses by checking the appropriate space following each item and entering any comment which you feel is appropriate. Please return by March 22.

1a. In regard to the three criteria/indicators identified for the preliminary assessment of program effectiveness, my major concerns are:

	AGREE	DISAGREE	COMMENT
"The question of credibility! Placement figures are manipulated by the instructors; MIS form needs to be reinvented. Completion: what does it tell us?"	____	____	_____
"Vague definition. Lack of crisp formula for determining leading indicators."	____	____	_____
"MIS data should be used for all criteria to assess same time period."	____	____	_____
"There should be included criteria & indicators to assess the instructor's ability-effectiveness and also criteria/indicators to assess both (separately) the effectiveness of the recruitment/ public relations and the coordinator of instruction's participation and effectiveness. We have in effect that if there is a problem the instructor has it."	____	____	_____
"Continue searching for common definition of completion."	____	____	_____
"Using averages. The three major criteria are good, but better definitions will help."	____	____	_____
"Definitions (Completers, related-field, placement, etc.) Possible inaccuracy in MIS data. Need for meaningful method to massage data to find 'trends.'"	____	____	_____
"Have a definition which will allow all schools to report completers in the same manner."	____	____	_____

1b. My recommendations are:

	AGREE	DISAGREE	COMMENT
"Would like to see definitions in terms having close correlation between this project and the SACS Evaluation projects. Would like to see further work on categorizing programs formula. Would like to see means of getting needed MIS data cleanly."	____	____	_____
"We use trend from point A (1st qtr) to point B (last qtr) either up, down or level and associate a rating to each of these three conditions."	____	____	_____
"Define more precisely graduate/completer and field/related placement. Develop formulas/computer program that can be uniformly used."	____	____	_____
"Redo method of placement reporting; rethink our position of value of 'completion'".	____	____	_____

2. In regard to the criteria identified for secondary assessment of program effectiveness, my major concerns are:

"Credibility of figures! Employer evaluation cannot be accurately measured. Student evaluation, unless a very good sample, is worthless. Facilities, equipment, etc. evaluation can be manipulated if only in house people are used."	____	____	_____
"Too many factors/standards--these need to be refined/consolidated to no more than three criteria. Need a more objective/standardized method reassessment."	____	____	_____
"Amount of information available on student evaluation and employment evaluation is inadequate for judgement. Rating scale needed on forms used to gather information."	____	____	_____
"As far as I'm concerned, the employer's and student rating is a total waste because of the low number of returns and the rating method."	____	____	_____
"Employer evaluation: need sufficient response to serve as an indicator."	____	____	_____
"[illegible]ating all six criteria equally."	____	____	_____

	AGREE	DISAGREE	COMMENT
"Difficulty of getting craft committee inputs and fact that	____	____	_____
"The limited number of employers' evaluations available."	____	____	_____

2b. My recommendations are:

"Survey a greater number of employers at least in 'C' programs."	____	____	_____
"Have an expert panal for each program category who could judge facilities and make evaluation."	____	____	_____
"Use a weighted system." (Rather than treating all 6 criteria equally)	____	____	_____
"Develop standards & criteria for space/facilities."	____	____	_____
"Develop uniform assessment process."	____	____	_____
"Rethink inclusion of student and employer evaluation. Redesign equipment, etc. survey and use outside evaluators."	____	____	_____

3. In considering the recommendation of combining the criteria into one assessment for all programs, my reaction is:

"To keep them separate. The first three are the most critical and there is no need to go to the secondary assessment if the first three indicate the program is strong. If there are weaknesses in the second six, they will be reflected in the first three."	____	____	_____
"Positive--if we rethink the items that are in the assessment."	____	____	_____
"Both primary and secondary indicators could be combined. Weights could be assigned to each indicator."	____	____	_____
"No. Need 3 critical criteria to determine there is a proglem and the secondary to determine where problem is."	____	____	_____

	AGREE	DISAGREE	COMMENT
"No. Because if we are going to follow the concept of critical criteria, we would eliminate them. If we want to develop a total evaluation process for all programs each year, I don't think that some of the criteria in the secondary assessment are adequate."	____	____	_____
"No. There is not sufficient commonality among programs."	____	____	_____
"OK on idea IF timelines for various assessments could be made feasible."	____	____	_____
"No...Do 'C' programs and any other program the director identifies as in need of further study."	____	____	_____

4. In regard to the proposed <u>standards</u> set for the assessment of ongoing programs, my primary recommendation is:

"For a program to receive all 'C's' to be rated a C program and not two as it is now written."	____	____	_____
"OK for critital criteria. Secondary criteria need to be reworked."	____	____	_____
"Standards should be expressed both in terms of current conditions and trends."	____	____	_____
"Standards seem to be adequate for assessment."	____	____	_____
"It appears that many programs are successful inspite of unaddressed needs, equipment, supplies, etc. Misleading."	____	____	_____

5. In regard to the <u>procedures</u>, my primary recommendation is:

"No change."	____	____	_____
"Procedures are fine if we proceed with credible information."	____	____	_____
"The procedures for primary assessment should be standardized by computer program which display graphically leading indicators relating to a norm or benchmark."	____	____	_____ ____

106

	AGREE	DISAGREE	COMMENT
"More staff involved in study. Sub-committee from advisory committee set up to study secondary assessment. Determine another method for student and employer evaluation."	____	____	_____
"Find methodology for controlling variables. Strong programs appear weak and weak programs appear strong."	____	____	_____
"Looking at results of pilot schools before setting specific percentages in order to have realistic numbers as standards."	____	____	_____
"This needs additional work to make sure weakest programs are identified."	____	____	_____
"Devise a straight forward system/formula for determining trends."	____	____	_____

6. Of the total assessment process for ongoing programs to date, the three strongest features are:

"Three standards for primary assessment. Comprehensiveness of criteria. Followup plan."	____	____	_____
"Organized plan of action and good leadership. Mostly valid criteria items are used. Method of organizing program modification good."	____	____	_____
"Local involvement. Systematic process. Timing."	____	____	_____
"Placement, facilities, equipment assessment."	____	____	_____
"Shows that you have problems. Shows what problems. Shows what you can do about those problems."	____	____	_____
"Looking at outcomes. The attempt to look objectively. The gathering of ideas from pilot school personnel."	____	____	_____
"Provides a formal system of evaluation consistent all over the state. Provides for recommendations to improve weak programs. Provides for budget requests to modify, expand."	____	____	_____

	AGREE	DISAGREE	COMMENT

7. Of the total assessment process for ongoing programs to date, the three weakest features are:

"Use of averages. How we determine the secondary criteria ratings (use of outsiders). Standards for summary assessment." ____ ____ _____

"Credibility of figures. Inclusion of some invalid secondary assessment items. MIS form from which we draw information." ____ ____ _____

"Data base is poor. Definitions are vague. Total process too complex and time consuming." ____ ____ _____

"Enrollment to completion. Student and employer evaluation. Employment demand survey." ____ ____ _____

"Data sources. Time frame. Instructor involvement." ____ ____ _____

"Difficulty in getting certain 'clean' data. The incompatibility between the program categorizing results and some know Pgm condition resulting from one factor being able to shift results." ____ ____ _____

"May not identify some weak programs without further study. Enrollment, placement, completers are not compared for same FY period. Are 'C' programs the ones that are really the weakest ?" ____ ____ _____

8. My three recommendations for addressing the weaknesses are:

"Give the director flexibility to identify needs in programs not shown as 'C'. Make sure that future studies use data in the same FY period." ____ ____ _____

"Use only 'clean' local data rather than simply suing MIS data. 'Test and try' will give results that are perceived as valid. Work with MIS to obtain data based on 'our' definitions which may vary from present MIS definitions, such as for 'completers.'" ____ ____ _____

	AGREE	DISAGREE	COMMENT
"Standardize data sources. Longer time frame, at least one year. Involve instructor at earlier time."	____	____	_____
"Must clean up data collection process."	____	____	_____
"Develop clear definition. Use leading indicators as key factors. Further streamline process to reduce time/criteria/ subjective factors."	____	____	_____
"Use trend lines--point A to B. Don't compare the 3 primary criteria to each other, but let each stand alone, i.e. don't compare completors to enrollment. Better methods of collecting data for the secondary criteria and assessment."	____	____	_____
"Redesign MIS form replacement. Reevaluate 'completion.' Rethink items on secondary assessment and use outside evaluators."	____	____	_____

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